ENGINEERING NEWS-RECORD

Engineers rebuilt this coast road in Sicily as Allied Armies closed in on Messina

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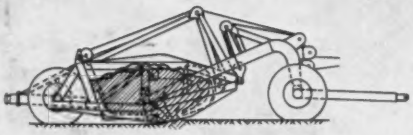
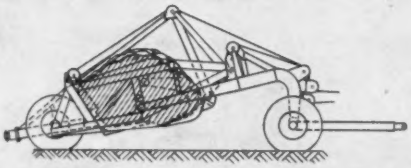
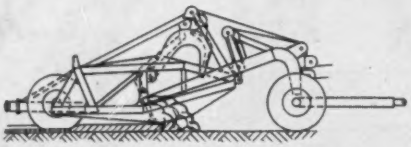
LESS POWER TO LOAD



(1) LOADING POSITION



(2) CARRYING POSITION



(3) DUMPING POSITION

GW Cable-Controlled Scrapers provide three ways to speed-up earth moving, do the job in shorter time—and "clear the way" to Victory!

Illustrations, left, show the loading, carrying and dumping positions. When loading (1) the line of draft is located to prevent the cutting edge from being pulled out of the ground. Weight is evenly distributed. Boiling action of dirt, loads the bowl and gate with a minimum interference of the material already loaded. In the carrying position (2) the high center clearance of the cutting edge is ideal over soft or uneven ground.

Front portion of load dumps (3) by raising the apron. Remainder of the load is forced out efficiently by *positive rolling ejection*, as the bottom of the bowl reaches a steep angle, resulting in less cable wear. Wide space between cutting edge and apron permits dumping large sticky loads without interference. The cutting edge remains fixed while dumping, thus providing accurate control of depth of spread.

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The Week In Engineering and Construction

GINEERING NEWS-RECORD • SEPTEMBER 2, 1943 • VOLUME 131 • NUMBER 10

hipments of portland cement estricted to regional zones

ar Production Board orders cement shipments re-ricted to regions in which the product originates—ountry divided in 93 zones—Some shipments exempt

order to prevent unnecessary long-ce hauling by the railroads, the Production Board has extended ge of its order General Haulage rvation Order T-1 to include bulk ries of portland cement. The new which becomes effective Sept. 24, ishes 93 zones outside of which t is not to be shipped by rail in f 20,000 lb. or more, except with authority. The zones have been so out that a purchaser of cement, ally, can call on more than one of supply. Major cement-produc-reas are taken as points of origin ch zone. Thus, Zone 47, which has go, South Chicago and Buffington, as point of origin, covers central orthern Illinois, all of Indiana and of Michigan, Ohio, Iowa, Wiscon-d Minnesota. Some zones overlap.

Cement covered by the order

tland cement, as defined in the is any portland cement (except portland cement) that conforms following specifications: Emergency alternate federal specifications, portland E-SS-C-191b; E-SS-C-206a; A.S.T.M. emergency alternate specification, EA-C 150, Type I and Type II.

Some shipments exempt

Major exemptions apply to cement shipped under certain conditions for military purposes. Shipments entirely by water are exempt as are shipments for less than 50 miles and lots less than 20,000 lb. No shipment can be subdivided to come within this weight exemption.

With respect to military shipments, the order states: "Any person may originate a controlled delivery of portland cement to or for the account of the Army or Navy of the United States if he has received from a duly authorized Army or Navy officer a certification in writing." The form for such certificate is outlined in the order. These shipments must be reported to the WPB by the shipper within ten days.

According to WPB officials, shipments to private contractors on Army or Navy jobs may be made. On jobs not for the Army or Navy, authority from the WPB is needed.

In an emergency, deliveries for export may be originated prior to receipt of Army or Navy certificate.

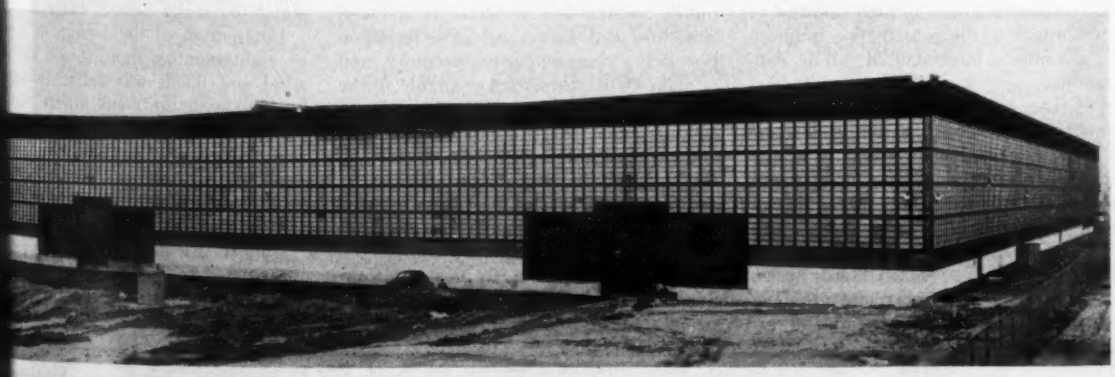
Full details are given in Schedule 1, of General Haulage Conservation Order T-1, Portland Cement, which is obtainable from the Stockpiling and Transportation Division of the War Production Board, Washington, D. C.

• • •

Suit would force cleanup of beaches at Los Angeles

A taxpayer's suit, filed in the Superior Court at Los Angeles last week, asks for an injunction to prevent the city from further disposal of sewage through the plant located on the ocean shore at Hyperion. The action also would compel the city to clean beaches which, it is charged, have been littered with filth as the result of inadequate provision at this plant for handling the present sewage flow. (Quarantine of bathing beaches in the vicinity of this plant was reported in *ENR*, April 15, 1943, p. 520.)

The Hyperion plant, it is claimed, is heavily overloaded, discharges a large percentage of raw sewage into the ocean and is a menace to public health. The suit seeks to enforce employment of a disinterested engineer to recommend remedial measures including the possibility of obtaining revenue from an improved method of sewage disposal.



A four-acre blackout plant in which pressed wood is used in place of glass

ed to conserve critical materials, this blackout plant was constructed some-the East Coast at a saving of nearly 2,000 tons of steel. Built by the Westinghouse Electric & Mfg. Co., the new factory will produce special-type radio equipment for the army. Instead of window glass, the plant has more than an acre of pressed wood panels and nearly two miles of tubular fluorescent lamps.

Missouri's construction industry forms a citizens postwar construction council

Definite steps taken to insure quick employment for men and women when discharged from the armed forces and war production plants. Movement sponsored by the Associated General Contractors.

Seventy men met in Jefferson City, Mo., on Aug. 10 and formed the Citizens Postwar Construction Council. The meeting was called by the Associated General Contractors of Missouri, and there were present men representing every branch of the construction industry from every portion of the state, including contractors, engineers, material dealers, equipment dealers, bond men and public officials.

A permanent organization was formed; officers were elected; and offices were established in the offices of the Associated General Contractors in the Hotel Governor Building, Jefferson City.

Regarding the organization of the council, E. C. L. Wagner, manager of the Associated General Contractors of Missouri, says:

"Organizations and associations throughout the state, such as engineering and architectural societies, were invited to become a part of the council. Where no societies or trade associations were in existence, every effort was made to invite all individuals and firms connected with construction in Missouri."

The main objectives of the council, and the methods which it will follow in attaining them, are stated as follows:

(1) In order that the men and women discharged from our armed forces, or from our war production plants, may find honorable employment at decent wages, the council will encourage advance planning of public construction jobs, so that those jobs can fill in while private industry is being reconverted to production of peacetime products.

(2) In that undertaking the council will concentrate the united efforts of every branch of the construction industry and all others interested in public construction.

(3) The council will assume the responsibility of arousing public interest in every community in Missouri in the necessity of carrying out, now, every preliminary step, so that contracts can be awarded and men actually put to work on very short notice in every locality where public works construction is necessary to meet the unemployment problem.

(4) The council will attempt to arrange for the appointment of community-wide committees, representing every business, profession, and public interest in every community in the state, to study the needs of the comunity for worthwhile public works, the financial problems involved in supplying funds for the preparation of surveys and plans and for the cost of sites and rights-of-way, for paying for the actual construction work, to recommend to the regularly constituted legal authorities steps for the undertaking of those projects in the order of their importance, and furnish the necessary public support to carry them out.

(5) The council will urge upon each local citizens' council or committee that the only projects undertaken be necessary and useful ones, which will add to the wealth of the community and to the prosperity of its citizens. The council will likewise urge that each community plan to raise the necessary funds itself and not rely upon federal aid.

(6) The council will undertake a comprehensive study of the legal phases of such a postwar program and will advocate and work for any changes in the state's constitution or laws, which may prove to be necessary in order to allow a constructive program of necessary public work to be undertaken, and which will enable each local community to finance such a program in order to furnish needed employment and build up the wealth of the community at the same time.

(7) Through the work of local citizens' councils, the council will endeavor to obtain information from each community regarding its problems, its needs for public construction projects, its financial situation, and to compile this information into a comprehensive inventory, and to make that information available to the public and to the members of the forthcoming state constitutional convention, and to legislators and public officials, so that proper laws may be enacted if necessary, and so that postwar problems can be solved intelligently on a sound, economic basis.

Officers of the Citizens Postwar Construction Council were elected at the meeting on Aug. 10 as follows: Chairman, F. T. Brown, district sales manager for Lehigh Portland Cement Co., Kansas City; vice-chairman, Bruce J. Carl, executive director of the Missouri Municipal League, Columbia; vice-chairman, R. R. Riney, president of the Associated General Contractors of Missouri, Kirkwood; secretary-treasurer, E. C. L. Wagner, manager of the Associated General Contractors of Missouri.

• • •

Peace River bridge on Alcan is dedicated

The $1,500,000 suspension bridge which crosses the Peace River in British Columbia on the Alaska Highway with a 930 ft. main span (*ENR*, Aug. 5, 228) was dedicated August 30 by Maj. Gen. Philip B. Fleming, Federal Works Administrator. The ceremonies at the bridge site were presided over by Brig. Gen. James A. O'Connor, commander of the Northwest Service Command and attended by Canadian and American officials including Commissioner Thomas H. MacDonald of the U. S. Public Roads Administration and Brig. Gen. L. H. Worsham, Division Engineer, Northwest Division, Corps of Engineers. At the same time that the exercises were being held at the bridge site, John A. Roebling Sons Co., which had the superstructure contract, celebrated the completion of the bridge at a dinner in Trenton, N. J., at which Brig. Gen. David McCoach, Jr., Assistant Chief of Engineers, U. S. Army, and C. C. Sunderland, chief bridge engineer of the Roebling Company were the principal speakers.

Referring to difficulties under which construction progressed, General Fleming said: "Concreting for the main piers was carried on at temperatures as low as 40 deg. below zero by Canadian caterpillar tractors. The work of erecting the main towers went forward on the ice. This meant they had to be completed before the ice in the river should break up, which normally occurs early in April."

Completion of the bridge in a period of eight months, fighting ice and snow, wind and floods was an achievement in keeping with the many others that have characterized the Alcan construction, said Mr. Sunderland at the dinner in Trenton. He gave full credit for the accomplishment to the "inspired field force who worked in superhuman manner."

Dufferin Paving Co., Toronto, Canada, constructed the foundations. The bridge was designed and its erection supervised by the U. S. Public Roads Administration.

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Chicago pushes work on water-treatment plant

Under the priorities made available to Chicago Sanitary District by the War Production Board to facilitate completion part of the South Side filtration plant (ENR, Aug. 26, p. 309) work has been started on the superstructure for the low-lift pumping station and the chemical building at that plant, according to W. J. DeBerard, city engineer. Bids were opened on the chemical equipment and others on Aug. 24. In about a month bids will be opened in the installation of the large pumps in the low-lift pumping station and on other equipment needed to put the pumping plant into service. A little later, bids will be taken on electrical installations for the chemical building and pumping station.

It is planned to have the plant in use to coagulate and settle water sometime next year.

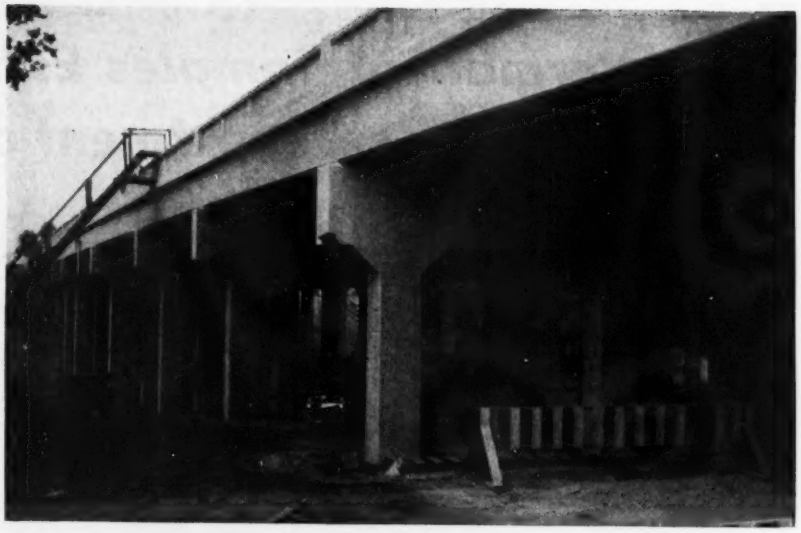
• • •

Texas completes plans for much highway work

Twenty-six million dollars worth of highway construction in Texas can be put under way within thirty days after the war ends if sufficient funds are available, DeWitt C. Greer, engineer for the Texas Highway Department announced recently.

This represents 26 percent of $100,000,000 worth of needed road improvements for which plans are being drawn. The department now has $16,000,000 worth of work in progress, mostly of emergency nature and Mr. Greer reported that materials and machinery are becoming available again, with the dwindling of other wartime construction. Costs of available materials are relatively high, and the Texas Highway Commission prefers to postpone work wherever possible to a date when more roads can be built for the money. In 1940, Mr. Greer said, an average mile of concrete pavement in Texas cost $20,000, compared with a present cost of $26,000. Truck traffic in Texas is at an all-time high. Shattered slabs of concrete are providing evidence that many trucks are not observing the state's gross load limit of 38,000 lb. Replacements must be made in many places on the Texas highway system, Mr. Greer said.

The department is planning with local authorities for four-lane interregional highways and with cities for approaches to these arteries. By conserving funds wherever possible, Greer said that the department hopes to have the plans and money available to supply employment quickly in the postwar transition period.



Salvaged steel used in Kansas City bridge

Steel I-beams, splice plates and bearing plates for a new viaduct to improve access to a war plant in Kansas City were obtained by the Public Roads Administration through the Salvage Section of the War Production Board. The viaduct is on an extension of Troost Ave. over 85th St., tracks of the K. C. P. S. R.R. and a stream. It consists of ten I-beam spans varying in length from 24 ft. 3½ in. to 65 ft. supported on open-type concrete bents carried to rock, the span layout being adopted to the available material.

Construction also was marked by unusual speed. The work, started on Feb. 24 of this year, was completed on June 11.

The List and Weatherly Construction Co. of Kansas City was contractor, with George H. Davis as superintendent. For the Missouri State Highway Department, H. M. Brush was division engineer and Floyd Drymon acting project engineer. C. W. Brown is chief engineer and V. W. Enslow, bridge engineer of the highway department. The contract price was $115,664.

Preston S. Sinton named Kentucky chief engineer

Preston S. Sinton, of Louisville, has been appointed chief state engineer of Kentucky. He has been assistant chief engineer for some time, and acting chief engineer since August 1. Mr. Sinton succeeds Ralph C. Wyatt.

• • •

Many construction workers must change jobs soon

The 2,600,000 persons who will have to transfer to munitions production or community service jobs between now and July, 1944, will include 860,000 construction workers. These estimates are given by Paul V. McNutt, chairman of the War Manpower Commission, who expects a large proportion of construction workers to change over with the completion in construction of facilities for producing war materials and vessels.

"It is easy to see why such large-scale transfers must take place," Mr. McNutt says. The military services plan to expand from 9,300,000 to 11,300,000 between July 1943 and July 1944. These men and women will be drawn from war-useful jobs as well as from other occupations."

The areas where there is a concentration of war production, he says, "can accommodate no more outsiders, but they must swell their war-useful labor forces, and this can only be accomplished by drawing on local sources of labor."

• • •

Contractors fight tides in Seymour Narrows work

Contractors' crews are putting up a strenuous battle against the tides in the drilling and blasting operations at Ripple Rock in the Seymour Narrows on the British Columbia coast (*ENR* July 1, vol. p. 27). Repeatedly the strong currents have nearly swept away the huge drilling barge as the splices on the 60-ton test steel cables have been pulled apart.

"The force of the rip tide eddies and whirlpool puts a tremendous strain on the cables, but the anchors weighing several hundred tons are holding," an engineer said. Contractors believe they will overcome the problem of keeping the barge in place by improved methods for splicing the cable.

Permanent Samples Exhibit Aids New York City's Department of Public Works

The Public Works Department of the City of New York has established a permanent exhibit of construction materials, which is unique in that most of the basic materials have been incorporated into the design of the floors, walls, partitions, ceilings and furniture of the offices of the department's Materials Section.

In these rooms, architects, engineers and contractors serving the city of New York are afforded an opportunity to study and compare hundreds of different types of materials and appliances in relation to their function and appearance in a finished structure—a far cry from the old method of searching the four corners of the drafting room for manufacturers' samples, which seldom, if ever, were to be found. The smaller items in the exhibit are attractively displayed in cabinets located strategically about the offices where they can be examined with ease.

A.I.A. filing system used

Each exhibit is given a classification number, which corresponds to the material classification as listed in the American Institute of Architects' standard filing system. For instance, the specimens displayed in the wall panel on domestic marbles bears the A.I.A.'s number 8-B, etc., and are arranged according to the National Association of Marble Dealers' adopted classification. This classification as to general characteristics and soundness comprises four groups—A, B, C, and D. This method of grouping facilitates the selection of marbles suitable for interior and exterior use.

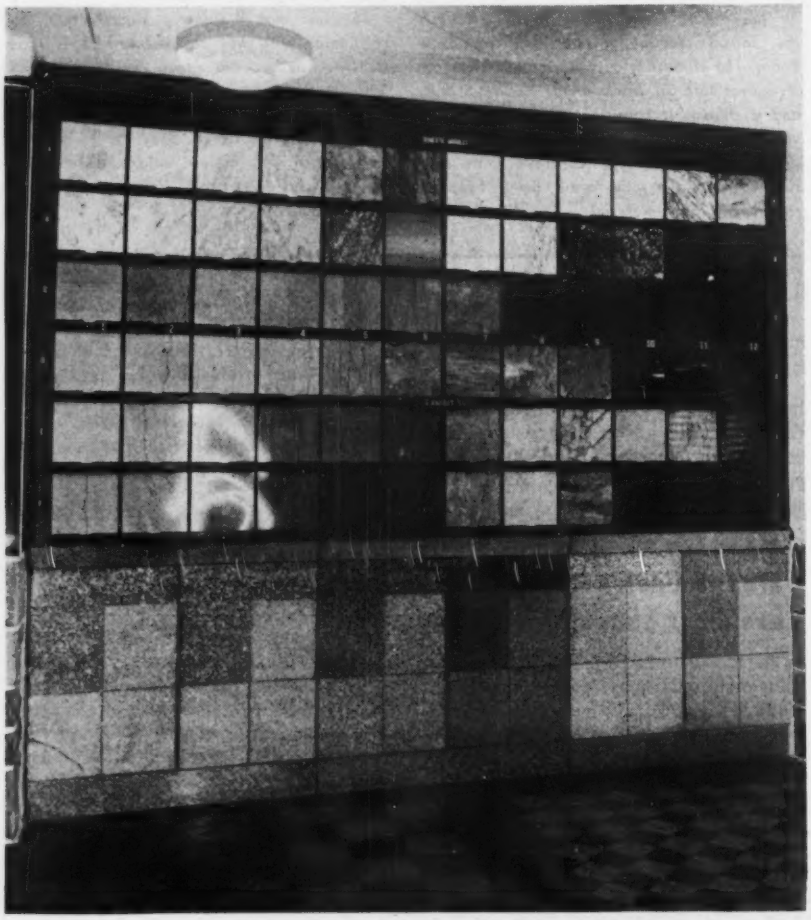
An index card filing system has been set up (following the A.I.A. system) which contains a list of all the various products on display by name, and the file is cross indexed as to the name and address of the manufacturers. A separate card file includes information concerning tests and approval by the Department's Board of Standards and Appeals. Thus, complete information is a record concerning the strength, durability, fireproof qualities, sound absorption and other vital information which can be referred to at will.

All samples on exhibit have been approved by the Board of Standards and Appeals and they are being used constantly as contract references in specifications on jobs let by the Department of Public Works. Space is available to manufacturers for installation of their samples once the approval of the Board of Standards has been secured and the product passed upon by the management of the Materials Section as being suitable for inclusion in the exhibit.

The idea of permanent sample rooms was originated several years ago. However, it might be said that the exhibit is still in its infancy, and further development is anticipated as additional space is allotted to the Materials Section.

The primary function of the Materials Section is the testing and approval of materials used by the Department of Public Works, and to act as consultant to the other public agencies of the city. This exhibit is only a by-product of the activities of this department, and was set up primarily to aid the various members of the Department of Public Works. It cannot be used for commercial purposes. However, the exhibit is open at all times during office hours and may be viewed by interested parties.

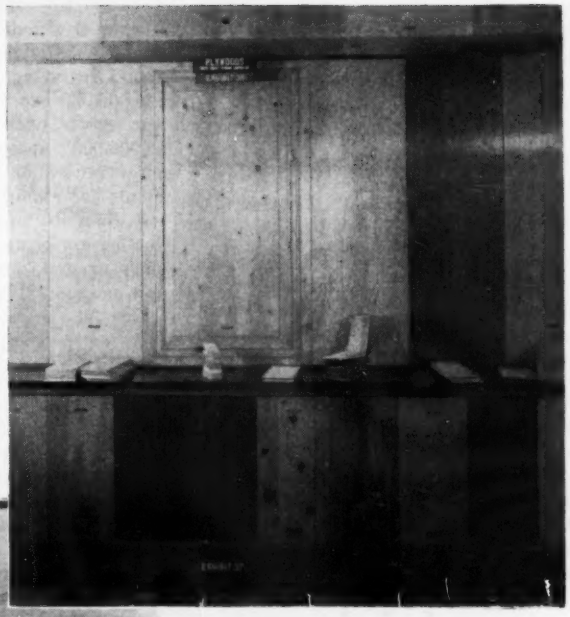
Commissioner Irving V. A. Huie, head of the Department of Public Works of New York City, gives credit to the personnel of the Materials Section, of which William S. Elliott is chief, and W. S. Sypher, architect, for conceiving and assembling the exhibit.



In this display are 72 specimens of marbles from 12 states. They are arranged according to the National Association of Marble Dealers' adopted classification—A, B, C, and D, as to their general characteristics and soundness. The granite display (lower panel) shows various surface treatments worked on one specimen, i.e., 4-cut, 6-cut, 8-cut, honed and polished faces.

this room can be seen two interesting types of brick wall struction. The panel in background is a cross-section of a e brick wall backed up and bonded to hollow tile, set hori- tally; the channels in the tile act as drainage ducts. The panel foreground illustrates the cavity type of brick wall construc- used extensively in England, which has a 2-in. air space, ture escape being provided for by flashing and weep-holes. two wythes are bonded together with copper-coated steel ties of Z-shape. Just above this panel is shown possibilities e use of extruded architectural terra cotta in a variety of rs. The illustration at right above shows the method of laying face brick panels. These cabinets hold about 200 ples in a variety of colors and textures made from shale refractory clays.

wood exhibit at right includes 30 specimens of veneer and ples as to how they may be used.



The wall in illustration at left is faced with natural stone specimens of Ohio Sandstone, Indiana Limestone, Virginia Greenstone, Tremolite, Crab Orchard Quartzite and Serpentine. All these are in varied finishes, textures and cuttings. The accordion type door is made of fabricoid mounted on an aluminum framework. This type of door can be had in large sections for dividing space into smaller units. The material may be sound proofed and the entire installation can be recessed at heads and jambs for complete concealment. At left is a steel double-hung window of hollow metal sash and frame. At right is an extruded-bronze, double hung window.

Activity on the Postwar Front

Postwar plans are increasingly occupying the attention for the federal government and of many states, cities and municipalities. Some of the latest developments from different sections of the country are as follows:

New York State—On July 23 the State Board of Regents approved a postwar educational building program to cost approximately $100,000,000. Thirty-four projects are listed.

* * *

Washington, D. C.—One of the most important improvements planned is the development of East Capitol St. to the Anacostia River, an undertaking which will do much to restore the architectural balance of Washington.

* * *

Indianapolis, Ind.—A Postwar Planning Committee has been appointed and will try to depend on local financial resources. Expansion of the sewer system and grade crossing elimination are being considered.

* * *

Pennsylvania—A $263,000,000 road building program includes plans for breaking the traffic bottlenecks in Philadelphia and Pittsburgh.

* * *

Maryland—Three big roads are proposed in the report of the Maryland State Planning Commission and the Department of Budget and Procurement—all starting from the District of Columbia. One would have a length of 24.5 miles running to Baltimore; another would be 25 miles to Annapolis, and a third 15.5 miles to Maryland Route 2 along the old Chesapeake Beach Railroad bed. Also proposed are 20.4 miles of road from Antietam creek to Frederick; 20.9 from near Elkton south to Route 213, and 9.2 miles from Cumberland to Frostburg.

* * *

St. Louis, Mo.—The city authorities of St. Louis, Mo., have announced the creation of a Metropolitan St. Louis Public Works Plan Association to co-ordinate development of public works after the war.

* * *

Milwaukee, Wis.—The Common Council has approved the first year's schedule of the city's long-term improvement program carrying an appropriation of $3,540,906. The program earmarks funds which, when peace comes, will be available for immediate use. Projects include: Illinois Steel contract, $255,816; school construction, $252,610; sewers, $893,000; Wisconsin Ave. viaduct restoration, $225,000; war effort and defense funds $250,000; municipal equipment, $300,000; street and alley opening fund, $299,475; playground purchases, $250,000; permanent electrical installations, $75,000; traffic control installations, $60,000; South Shore erosion elimination, $50,000; flushing tunnel intake pier protection, $20,000; reinforcement of municipal mooring basin revetment, $50,000; lake front development and outer drive, $500,000.

* * *

Michigan—Provisions for speedy planning of needed projects for postwar construction are in measures recently adopted by the legislature. Ground work for an elaborate public works program is being laid by the state planning commission, including an extensive development of public owned airfields, particularly throughout Michigan's resort areas. Increased state revenues indicate $46,000,000 can be applied to the postwar reserve fund by July, including $8,000,000 specifically designated to cover renovation and new construction. Funds for aiding the automotive industry when it retools for peacetime production are being accumulated in Michigan's unemployment compensation fund, now nearing $190,000,000.

* * *

Detroit, Mich.—The city plan commission has prepared a reserve capital improvement program for 1943-49 which includes projects of the Wayne County board, Port of Detroit commission, Huron-Clinton Metropolitan Authority and the State Highway Department. Improvements are allocated according to probable availability of funds from current tax levies to maintain the city's policy of financing capital improvements from current revenues.

* * *

Canada—Studies of the National Construction Council show a backlog of $300,000,000 worth of construction. The council has been advised to plan for the employment of 750,000 men after the war. It is studying various phases of postwar construction activity such as low cost housing.

* * *

Charlotte, N. C.—The city has announced a $11,477,425 public improvements postwar program. Engineering improvements include a total of $6,459,054 and involve the construction of a road to the municipal airport, $472,255; elimination of grade crossings, $2,147,755; widening of streets, $1,808,963; dredging and laying concrete bed and walls in Sugaw Creek channels, $879,078; pedestrian underpasses, $161,403; extensions to the water system, $680,500; construction of a new public library building and branches, $569,550, a new health building, $90,600; and construction totaling $267,950 to effect sanitary improvements.

* * *

Minnesota—Progress is reported in a postwar clinical study at Albert Lea, initiated by the Committee on Economic Policy of the National Chamber of Commerce. The project is a laboratory experiment in community planning. More than 300 local chambers of commerce have formed postwar planning committees and will be supplied with the data developed at Albert Lea. The purpose is to catalog potential workers for the postwar period, to ascertain the jobs likely to be available in private industry, trade and agriculture and on public projects.

* * *

Syracuse, N. Y.—The city is cooperating with Onondaga County on a replanning project expected to become a national model.

* * *

Connecticut River Valley—U. S. Engineers have reported that flood control projects to be built after the war in the Connecticut River Valley in New England will cost $56,000,000 to complete. Maj. Gen. Thomas M. Robbins, Assistant Chief of Engineers, has asked for an appropriation of $30,000,000.

* * *

Philadelphia—City Planning Commission has engaged Robert B. Mitchell, formerly chief of the urban section of the discontinued National Resources Planning Board, to head the commission staff. The city departments list upwards of $200,000,000 of needed public works improvements, including partly completed and deferred projects.

* * *

Chattanooga, Tenn.—Eight Chattanooga and East Tennessee engineering societies have volunteered their services to the postwar planning committee of the Chamber of Commerce and to the Resources Utilization Board of the city and county.

* * *

Pittsburgh, Pa.—Pittsburgh City Council has approved providing for city planning studies of 16 major projects, most of them part of downtown triangle developments and the continuation of the Ohio River Boulevard into the Golden Triangle business district. Allegheny County Commissioners have a total of $40,000,000 in public works projects in the planning stage.

Some recent changes in engineering faculties

appointment of Dr. John J. Ja- former dean of the school of eering and ture at the ity of Kan- director of perimental as assistant president of iversity of California announced Rufus B. von id, head of itution. Dr. Jakosky will direct s in industrial research for the ty.

Jakosky has served the United Bureau of Mines and the Research tion. Since 1929, he has been a ng research industrial engineer, arly in the field of geophysics. He ore than 150 United States and patents, and is a contributor to media on technical subjects, including radio, cracking processes, and oil shale recovery. He is the author of a text on "Exploration Geophysics." Following receipt of his engineering degrees from the University of Kansas, the University of Pittsburgh, and his D. Sc. degree from the University of Arizona, Dr. Jakosky did graduate work at the Carnegie Institute of Technology.

The election of Prof. R. L. Sumwalt as successor to Prof. Walter E. Rowe as dean of the school of engineering of the University of South Carolina was announced recently by President J. Rion McKissick. The board of trustees granted Dean Rowe's request for retirement from his position as dean and elected him dean emeritus. He will continue as professor of engineering. Professor Rowe has been dean of the school of engineering since 1922.

Professor Sumwalt came to the University of South Carolina in 1926 as associate professor of civil engineering, and was elevated to a full professorship in 1930.

Hanson K. Stephenson, who designed the new Selma bridge and many other structures during his nine years' service with the Alabama highway department, has resigned to accept a post as research professor at Texas Agricultural and Mechanical College.

Gordon L. Burt, resident engineer for Charles H. Hurd, consulting engineer of Indianapolis, Ind., has been granted a leave of absence to join the civil engineering faculty of Rose Polytechnic Institute, Terre Haute, Ind., for the duration of the specialized training program of the Army at the college.

luntary conservation n for water utilities

American Water Works Associa- Committee on Wartime Water Practice was called together by rug, Director, Office of War Utili- July 28, 1943, to formulate a r cooperation of public water operators with the broad conser- program.

Office of War Utilities emphasizes the main points of the water- onservation plan as follows:

primary objectives are to make water supply work to its maxi- lue in the war effort and to pre- waste by anyone. To attain these es we set for ourselves the elim- of those combinations of use and water which build up excessive peaks in demand; as well as her task of developing for our and its customers the elimina- year round waste—either by do- onsumers or by the largest in- non-useful draft upon the supply. easures which promise to bring e desired elimination of waste of ay be listed as follows:

emise inspections by the customer. on of waste in the household. Re- aking faucets and toilets.

stribution system leakage studies.— and repair of leaks in the mains e lines in the street.

drant inspections by firemen and —Control of use of hydrants se for any purpose other than fire

vice concerning proper lawn water- of bulletins, etc., to show that frequent and heavy watering of lawns will not improve the lawn.

(e) *Consulting Engineering Service.*—Advice concerning better methods of operation, involving ingenuity and the experience of others.

(f) *Contact with industry, especially that engaged in war work.*—This category of customers, operating on the war-boom basis is most likely to be wasting large amounts of water or using it in such fashion as to obtain little service from it. Here re-use is often possible.

(g) *Seasonal or peak load conservation measure.* Among these are:

(1) Promotion of the most effective use of water in industry—with emphasis upon re-use of water whenever production and sanitation conditions permit.

(2) Staggering or limitation of lawn sprinkling.

(3) Reduction of air conditioning uses of water.

(4) Definite control of irrigation uses.

(5) Drastic reduction of sewer flushing.

(6) Reduction of street washing.

(7) Control of public or semi-public drinking fountains, swimming pools, etc.

• • •

Texas engineering school has 1,465 summer students

Summer enrollment at the University of Texas engineering school totals 1,465 of whom 785 are Navy cadets, reports Dean W. R. Woolrich. Engineering training has been on a 24-hour basis. In three shifts 200 students are taking special army courses. Eighty-five girls are working toward assignments as technicians for the Curtiss Wright Aircraft Company.

Wartime sewage problems to be discussed by F.S.W.A.

The Federation of Sewage Works Associations has completed plans for the second Wartime Conference in connection with its fourth annual convention. The meeting, at the Hotel Sherman, Chicago, Ill., Oct. 21-22-23, will have a wartime character, from the exhibits of equipment sponsored by the Water and Sewage Works Manufacturers Association, to the significant subjects on the technical program. Attendance is expected to exceed that of any previous national sewage works gathering.

The program committee has laid particular stress on the solution of wartime and postwar problems of sewerage, sewage treatment, and industrial waste disposal. A symposium on wartime problems will feature discussion on priorities by A. M. Rawn and personnel problems by Capt. C. W. Klassen.

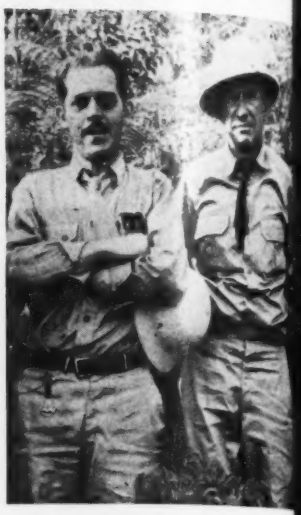
The problems of postwar planning and postwar construction of sanitation works will be reviewed from the viewpoint of governmental, engineering, public health agencies and sanitary engineering equipment manufacturers.

The session on postwar problems will be held by Morris M. Cohn, editor of *Sewage Works Engineering* and chairman of the committee for joint action on postwar sanitation. C. A. Emerson will speak from the viewpoint of the consulting engineer. A. E. Berry will present the Canadian viewpoint, and W. B. Marshall and E. L. Filby will describe the postwar plans of equipment manufacturers.

★ Engineers at Work o

Maj. Joe A. McEachern, *field engineer in northern Nicaragua and Honduras for the U. S. Engineers.*

Three key army engineers in Guatemala are, left to right: **D. Manning, Jr.,** *field engineer;* **Ray De Groff,** *field engineer; and* **Maj. Maurice C. Tobin,** *area engineer,*



N. B. Wood *(left), assistant to the* [illegible] *PRA engineer in Costa Rica, and* [illegible] **Gibson,** *in charge of all PRA bridge* [illegible] *Central America.*

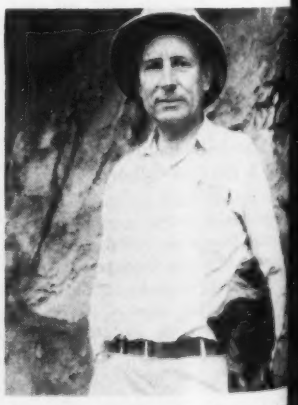
Maj. W. A. Ford, *field engineer in southern Nicaragua for the U. S. Engineers.*

Capt. George H. Barton, *area engineer in El Salvador for U. S. Engineers.*

Capt. H. J. Yount, *field engineer in* [illegible] *Rica for the U. S. Engineers.*

Capt. F. K. Mittry, *field engineer in Costa Rica and Panama for U. S. E. D.*

Capt. N. D. McLean, *chief of operations in the San Jose, Costa Rica, office of U. S. E. D.*



H. R. Stewart, *superintendent for* [illegible] *Mills Co. in Costa Rica.*

e Inter-American Highway ★ ★ ★

rown, *assistant resident engineer for S. Engineers, on a long section in , and* **Jack C. Dumas,** *resident en- r U. S. E. D. on the same work.*

Earl A. Terzian *(left), field engineer for PRA in Honduras and El Salvador, and* **Wm. Lowitz,** *superintendent on bridge work in the same countries for Frederick Snare Corp.*

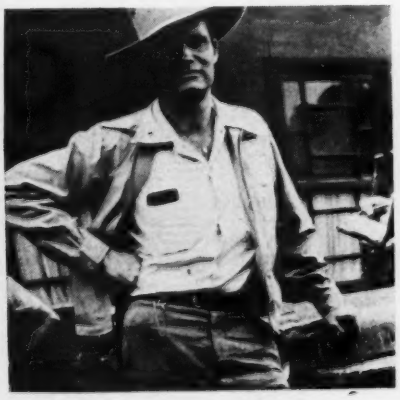
W. C. Thompson *(left), superintendent on 17-mi. section in Honduras for Swinerton-McClure-Vinnell, and* **G. K. Stanbrough,** *engineer on location for U. S. Engineers.*

D. Short, *assistant superintendent Wunderlich Co. in Costa Rica.*

Charles Long, *superintendent on a tough section in Nicaragua for Swinerton-McClure-Vinnell.*

K. T. Norwood, *resident engineer for U. S. E. D. on 27-mi. section at San Marcus, Honduras.*

lson, *resident engineer for the U. S. in northern Costa Rica.*



C. N. Wilczek, *resident engineer for the U. S. Engineers at San Ramon, Costa Rica.*

L. M. Post, *superintendent of grading for Martin Wunderlich Co. in Panama.*

Photo, Albert Kahn, Inc.

Cypress and cement tank saves critical steel

The attention of those who view the huge Dodge Chicago plant, division of Chrysler Corp., from a distance is first attracted by a new type of concrete water tank construction pictured above.

Plans for this plant, where large airplane engines will be built, had already been drawn when the WPB ruled out the use of structural steel for new building and water tank construction. Albert Kahn Associated Architects and Engineers, Inc., in cooperation with Chrysler Corp., promptly produced a modernized design that required less steel than ever before used in such a building and for almost no steel in the two water tanks to be built.

The actual tanks are made of cypress, each with a capacity of 100,000 gal., and mounted 125 ft. above grade on a cylindrical tower of reinforced concrete. Over 60 tons of steel were saved by using concrete and wood.

Road gravel requirements doubled in Michigan

An increase of nearly 100 percent in the amount of gravel required for repairs on Michigan's trunk line highways was provided for when the State Highway Commission, on Aug. 18, received bids on 624,525 tons of gravel. Only 350,000 tons were used last year. According to Charles M. Ziegler, state highway commissioner, the increase in gravel required for road maintenance is due to heavy damage caused by an extremely severe winter, with several cycles of freezing and thawing.

JOBS OF THE WEEK

ALUMINUM PLANT, Tennessee

Struck Construction Co., Louisville, Ky., has been awarded a contract for construction of an aluminum plant by Defense Plant Corp., Washington, D. The estimated total cost will be $18,000,000. Reynolds Metals Co., Louisville, will operate.

NAVAL AMMUNITION DEPOT, 7, New Jersey

Cauldwell-Wingate Co., New York, N. Y., has been awarded the contract for tion 3, a naval ammunition depot in Monmouth County by the Bureau of Yards Docks, Navy Dept., Washington, D. C. The estimated cost is $2,500,000 to $3,000

HOUSING, Michigan

The Public Housing Authority, Cleveland, O., received lowest bids for housing follows: Prefabricated housing, Miller Davis Co., Kalamazoo, Mich., $593,000; frame construction, $592,000; A. H. Proksch, Iron Mountain on plastered construction, $690,000; wood frame plaster, $667,000; Spence Brothers, Saginaw Mich., on masonry construction, $639,400. O. Winn and O. Brezner, High Park, are the architects.

HOUSING, Pennsylvania

Tobias Heller & Co., Inc., New York, N. Y., has been awarded a contract to dwelling units by the Public Housing Authority, New York, N. Y. The estimated cost is $1,827,000. Wigham & Lee, Philadelphia, Pa., are the architects.

SYNTHETIC RUBBER PLANT, Texas.

Defense Plant Corp., Washington, D. C., is expanding existing synthetic rubber plant at cost of $1,250,000. Goodyear Rubber Co. and General Tire Co., Barberton will operate and supervise construction. W. D. LaRue, care of the operator, is engineer.

MILITARY INSTALLATION, Michigan

U. S. Engineers, Pittsburgh, Pa., awarded a contract for the construction military installation, in Trumbull County to Herman Holmes, Crystal Falls Michigan. The cost is in excess of $1,000,000.

DOUBLE TEST HANGAR, Connecticut

Edwin Moss & Son, Inc., Bridgeport, Conn., will build a double test hangar Chance-Vought Aircraft Corp., Stratford. The cost will be less than $1,000,000 Albert Kahn, Inc., Detroit, Mich., is the engineer and architect.

AERODROME, Tor Bay, Newfoundland

Dept. of Transport, Ottawa, Ont., awarded a contract for developing aerodrome clearing, stumping, grading, smoothing, hard surfacing, runway and drainage McNamara Construction Co., Toronto, Ont. The estimated cost is $840,000.

MILITARY INSTALLATION, Washington

U. S. Engineers, Seattle, Wash., awarded a contract for a military installation King County to Woodworth & Co., Inc. and MacDonald Building Co., Tacoma Cost is to exceed $2,000,000.

IMPROVEMENTS, Nebraska

Peter Kiewit & Sons Co., Omaha, Neb., and Big Horn Construction Co., Sheridan Wyo., have been awarded a contract for the construction of improvements in Willow County, by the U. S. Engineers, Omaha, Neb. The estimated cost $500,000.

HOUSING, Rodeo, Calif.

Leo Epp, San Francisco, Calif., was the lowest bidder for the construction housing and an administration building, when the Housing Authority of Contra Costa County, Martinez, opened bids, at $1,655,377. E. Geoffrey Bangs, San Francisco, Calif.; Keith O. and Eldridge T. Narbett, San Francisco, are architects.

DAM, California

Macco Construction Co., Clearwater, Calif., has been awarded the contract by California Water & Telephone Co., San Francisco, for Sweetwater Falls Dam San Diego County, at a cost of $1,114,890. Clayton B. Neill, and Loveland Engineers, San Francisco, are the engineers.

HOUSING, Charleston, S. C.

Henry C. Beck, Atlanta, Ga., was the lowest bidder when the Housing Authority the City of Charleston opened bids for housing project, at $1,012,700. Douglas Ellington, Charleston, is the architect.

Note—Additional bidding and contract news on many projects large and small appear in the Construction section beginning on page 13.

Construction Communiques

Engineering News from the Battlefronts

ly—Speed was the outstanding fea- of the successful Sicilian campaign, the work of our engineer troops was ng the biggest factors in making that ed possible. Harold V. Boyle, Associ- Press correspondent, said recently: enty-four hours after they landed in ly under attacks by Nazi planes, erican soldier engineers accompany- the invasion troops had built and dy for service a complete landing field Allied fighter planes.

"We just grabbed the flattest wheat we could find and went to work," Lieut. Edwin Munroe of Talladega, "In 24 hours we had a taxi trail all nd the field, the runway ready, and oline, ammunition and oil to supply planes.

"Our equipment was landed the day r the invasion or we could have been operation even sooner. We landed at a.m. one day and by 5 p.m. that same we were turning that wheat patch an airport."

In another dispatch Mr. Boyle said: "American combat engineers helped to ck the German defenses at the Cesaro eway to Randazzo by the almost raculous feat of building a 12-mile pply road in three days through terrain t was very difficult. There was no d, not even a footpath, in the area wanted to traverse, and when we shed it the road crossed 13 mountains h a number of peaks in between," said t. Alex T. Forrest, of McKeesport, Pa. e also had to cross a river bed every f mile or so."

t was necessary to have a road from r Capizzi to Mt. Camelato, west of aro, in order to flank the town and cut main Axis route from Cesaro to San ata on the northern coast. Construc- of this highway also enabled the ericans to bring up their artillery.

Alaska—In the Fox Islands, the first of group jutting out from the Alaskan t toward the Aleutians, a battalion of bees has been building a series of rating bases. Facts concerning their vities were given by Lieut. (j. g.) El- F. Higdon in the Washington "Eve- g Star."

Working in sub-zero temperatures a ater part of the time and in continuous ds of gale-like force, the engineers down into the tundra until they hit rock, on which they laid the concrete ndations. Even these furnished prob- and the Seabees devised from sal- ed material special flame throwers ch kept an umbrella of hot air over newly poured concrete to keep it n freezing before it was set. The usual hods of covering it with canvas and burlap could not be followed because violent gales would tear off the cover.

A road was required along the water's edge to shorten the distance between two operating points for the armed forces. But the water came right up to the base of cliffs 300 ft. high. The Seabee battalion cut back the cliff until they had space to build a concrete road wide enough for two trucks to pass.

Many times the forces had to stop for four or five days at a time because of the blinding, wind-driven snow. But last spring the Seabees delivered to the fighting forces quarters, facilities, special military construction, two power plants, a water supply and broadcasting station.

Dutch Guiana—One of the world's unique roads connects Zandery Field with the capital city of Paramaribo—a highway called the "Million Dollar Highway." and the most valuable road in the world.

Built on a base of mahogany and surfaced with bauxite, the ore from which aluminum is made, the road was constructed in record time by U. S. Army Engineers. There is no estimating the intrinsic value of the materials which went into its construction, but in that region those materials are the cheapest and most readily available.

In Dutch Guiana mahogany is one of the most common and most durable woods, and can be had anywhere just for the cutting, and that country has the world's richest deposit of bauxite.

Fort Bragg, N. C.—The Army has established here the largest sanitation demonstration area of its kind in the country. It has never forgotten that in World War I typhus killed 150,000 persons in Serbia alone. The Fort Bragg demonstration area, directed by Brig.-Gen. Henry C. Coburn, Jr., post surgeon, includes various types of sanitary installations for overnight bivouacs as well as semi-permanent and permanent camps.

Combining skill and ingenuity in using available materials in varying terrains, the demonstration features appliances for disposal of wastes, cleaning and washing facilities, and drinking water purifiers. The demonstration includes an underground food storage box designed to preserve perishable foods for from two to six months. It functions almost as effectively as an electric refrigerator.

Another installation is a "flash pan incinerator" which uses waste motor oil and water as a fuel and can dispose of garbage for an entire regiment.

Press Ass'n

U. S. Engineers rebuild a road in Sicily

Before the victory had been won in Sicily, our Army engineers found plenty of work to do. Here they are busy filling in a portion of a road near the north shore of the island. This road is typical of many that were gouged out by shellfire while the battles were still on. This is typical of the work our engineer and construction troops will be occupied with in that area and probably eventually on the mainland of Italy also.

OBITUARY

Frederick Skene, 69, former New York State Engineer, 1907-08, and former dean of the school of technology of the College of the City of New York, died Aug. 23. Having received the degree of bachelor of science from New York University in 1896, Mr. Skene entered the office of the Queens County Engineer. When Queens borough was organized as a part of Greater New York Mr. Skene was made assistant engineer of the Bureau of Highways in the borough and later engineer. In this post he supervised the building and maintenance of 750 miles of highways. In 1906 he was elected state engineer and surveyor. Later he joined the faculty of City College, became professor of engineering, and became dean of the School of Technology. In the first World War he served in France with the 305th Engineers with the rank of major.

Thomas W. Nicholson, 84, construction engineer, died Aug. 23 at Cleveland, Ohio. He was an associate of the late O. P. and M. J. Van Sweringen, Cleveland railroad and real estate magnates, when the brothers were mapping out their Shaker Heights residential project 30 years ago.

Ralph W. Lawton, 74, retired engineer and vice president of the Los Angeles City Health Commission, died Aug. 20. Lawton worked in India for 30 years as a civil, hydraulic, sanitary and waterworks engineer for the British government. He constructed infiltration plants, impounding reservoirs and water distribution systems.

Robert B. King, 45, died Aug. 15 at Royal Oak, Mich. For the past 18 years, Mr. King was associated with the Detroit office of the Austin Co. He joined the company as general foreman in 1925 and was promoted to assistant district manager in 1940. During the recent construction of a large all-timber war plant factory for Douglas Aircraft he was transferred to Chicago to supervise its erection.

James T. Gregg, 65, city engineer, Shelbyville, Ky., died Aug. 23.

Norman K. Hay, 60, former city engineer of Sydney, Nova Scotia, died Aug. 14.

Charles H. Jenks, 72, died at Union City, Tenn., on Aug. 19. For a number of years Mr. Jenks was consulting engineer, designer and supervisor of construction of sewerage systems, electric light and water plants throughout the South.

Ralph Durham Tobien, assistant to the chief engineer, Southern Railway System, died in Birmingham, Ala., on Aug. 15. Mr. Tobien went to Birmingham from Cleveland, Ohio, in 1905, joining the engineering staff of the Southern Railway. The next year he was appointed assistant engineer, and was stationed in Washington for five years, after which he returned to Birmingham, where he acted as maintenance-of-way engineer for the Southern's southern district. He was promoted to assistant general manager of the company's western lines. In the latter part of 1942 he was appointed assistant to the chief engineer.

Roy Albert Curran, 55, construction engineer with the Bayonne, N. J., plant of the Standard Oil Company of New Jersey for some time, died in Jersey City on Aug. 28.

John A. Foulks, 67, former chief water engineer in Newark, N. J., and for the last year associated in an engineering capacity with the RFC in Washington, died Aug. 30. He was graduated from Sheffield Scientific School, Yale University, in 1901. For two years he was with the Pennsylvania Railroad Company, then became a partner in the firm of Schermerhorn & Foulks, consulting engineers. During the first World War he was a captain in the Army Ordnance Corps overseas.

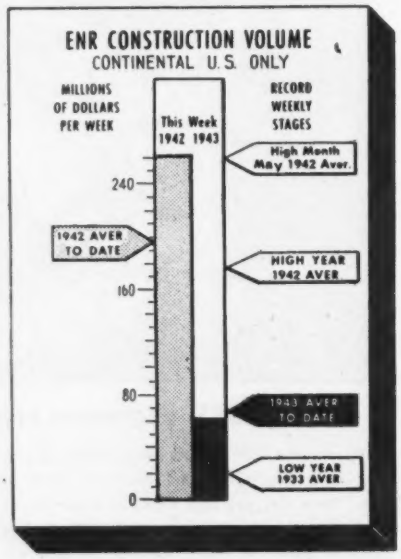
Richard A. Leussler, 76, Omaha, Neb., vice-president of the Omaha Steel Works and the Plattsmouth Bridge Co., died August 21. Formerly, he was vice-president and general manager of the Omaha & Council Bluffs Street Railway Co. and was with that company for 25 years.

CONTRACTS AND CAPITAL

CIVIL ENGINEERING construction in continental U. S. for the week total $61,674,000. This volume, not including the construction by military combat engineers, American contracts outside the country, and shipbuilding, is 52 percent higher than in the preceding week, but is 76 percent below the total for the corresponding 1942 week.

Public construction is 86 percent above last week as a result of the 32 percent gain in state and municipal work, and the 92 percent climb in federal volume. Private work is 39 percent lower than a week ago. Comparisons with the week last year show an 8 percent gain in private, but public is 78 percent lower.

The current week's volume brings 1943 construction to $2,285,762,000, an average of $65,307,000 for each of the 35 weeks of the period. On the weekly average basis, 1943 volume is 67 percent below the $7,181,568,000 reported for the 36-week 1942 period. Private construction, $290,036,000, is 33 percent lower than last year, and public construction, $1,995,726,000, is down 70 percent when adjusted for the difference in the number of weeks.



In the classified construction groups gains over last week are in sewerage, bridges, public buildings, streets and roads, and unclassified construction. Industrial building is the only class of work to gain over a year ago.

New capital for construction purposes for the week totals $2,252,000, and is made up of $2,000,000 in corporate security issues, and $252,000 in state and municipal bond sales. New construction financing for the 35-week 1943 period, $2,928,978,000, is 68 percent lower than the $9,524,024,000 for the 36-week period a year ago.

CONTRACTS

Continental U. S. Only
(Thousands of dollars)

	Week Ending Sept. 3 1942	Aug. 26 1943	Sept. 3 1943
Federal	$246,581	$26,703	$51,1[illegible]
State & Municipal	8,821	2,870	3,7[illegible]
Total public	$255,402	$29,573	$54,9[illegible]
Total private	6,269	11,065	6,7[illegible]
TOTAL	$261,671	$40,638	$61,6[illegible]
Cumulative			
1943 (35 weeks)			$2,285,7[illegible]
1942 (36 weeks)			$7,181,5[illegible]

Note: Minimum size projects included are: Waterworks and waterways projects, $15,000; other public works, $25,000; industrial buildings, $40,000; other buildings, $150,000.

NEW PRODUCTIVE CAPITAL

	1942 36 weeks	Cumulative 1943 35 weeks
NON-FEDERAL	$557,126	$273,1[illegible]
Corp. Securities	169,324	17,[illegible]
State & Mun.	176,683	97,[illegible]
R.F.C. loans	128,419	[illegible]
FPHA loans	.....	3,1[illegible]
R.E.A. loans	.....	20,[illegible]
Fed.-Aid Hwy.	82,700	12[illegible]
FEDERAL	$8,966,898	$2,655,8[illegible]
TOTAL CAPITAL	$9,524,024	$2,928,9[illegible]

ENR INDEX NUMBERS

		1943	1942
Index Base = 100			
Construction Cost	Aug. '43	291.38	[illegible]
Building Cost	Aug. '43	228.49	[illegible]
Volume	July '43	175	[illegible]

CONSTRUCTION REPORTS

Compiled by Business News Department—Engineering News-Record, 330 W. 42nd St., New York
ELSIE EAVES, Manager *SCOTT McLEOD, Statistician*
(Daily service also available—Write for details)

WATER SUPPLY

POSED WORK

lifornia—U. S. Eng., 74 New Mont- r St., San Francisco, reservoir, Job 90, central California.

lifornia—U. S. Eng., 74 New Mont- y St., San Francisco, reservoir, Job 72-2. San Francisco Co.

f., Napa—Napa City Council, City Hall, istributing reservoir near Crawford Bryan off Foothill Blvd. $25,000. August Kemp- city engr.

Decatur—Imprv. water sys., incl. facili- r clarifying water supply from Lake ur. Warren & Van Pragg, Decatur, r.

, Bunkie—L. P. Garcia, mayor, Bunkie, g deep well for waterworks, $15,000. eek FWA gr.

, St. Charles—F. B. Brockgreitens, city St. Charles, 1 mi. g. tank for water 50,000 bonds voted. W. Haltman, 101 in St., engr.

, Geneva—Exten. water and sewerage 25,000. Applied for FWA funds. R. , Lincoln, engrs.

J., Paulsboro—Socony Vacuum Oil Co., oro, water filtration plant bldg. 00. H. A. Kuljian Co., 1518 Walnut hila., Pa., engr.

East Liverpool—E. Greenawault, mayor, erpool, 14 in. c.i. water supply main from ipal water plant to Pennsylvania-Ohio r. $40,000. W. W. Watkins, E. Liver- Serv. Dir.

, Port Isabel—B. B. Burnell, mayor, ing pump. plant and equip., construct- orage dam. Tamm & Fitzgerald, 107 st St., Harlingen, engrs.

sh., Seattle—Water Dist. 20, c/o Gard- Gardner & Hitchings, engrs., Arctic Seattle, Zone 4, imprv., exten. water outh of South Park. $140,000.

C., Dawson Creek—Water supply sys. 00 voted. Dpt. Pensions & National Sussex St., Ottawa, Ont., engr.

S., Canso—Installing waterworks sys. Engineer, c/o Arthur Schrader, Town

, Quebec City—F. X. Choinard, city epairing watermains throughout city. 00. E. Hamel, City Hall, engr.

, Quebec City—F. .X. Chouinard, pality clk., water supply services and Pitometer Co., 50 Church St., New N. Y., U. S. A., will make inspection.

, Regina—4 wells, $36,606 voted. J. Farrell, City Hall, engr.

ASKED

Bids Asked September 7

McKeesport — Bd. Suprvs., Versailles F. A. Gerstner, secy., 201 Congress St., d w.i. galvanized water line, bell tees, ss plugs, brass corp. cocks, brass gate valve boxes oakum, pig lead. Versailles E. A. Shope, 806 Amity St., Homestead,

Bids Asked September 9

, New York—Comr. Water Supply, Gas tricity, Municipal Bldg., Zone 7, haul- ying watermains and appurtenances in d 114 Sts. and 14 Rd., College Point, ard, Queens Boro. Plans deposit $1.

, Green Bay—Green Bay Water Comn., l. reservoir and pump. station, Contr. rical work, Contr. 3 pump, equip., 4. flow meters, Contr 5, chlorinator. deposit $10. Foeller, Schober, Berner, & Jahn, 310 Pine St., archts. J. e Engr. Co., 608 N. 8 St., Sheboygan. CD 5/5/42—ENR 5/7/42.

Bids Asked September 10

, Medway—Town Water Dpt., pump. unit for water sys. $15,000. Whitman ard, 89 Broad St., Boston, engr.

Bids Asked September 13

St. Johns—H. Morais, city clk., St. iltration plant addn. $50,000. Edgar s, City Hall, engr.

IDDERS

, Mineral Wells—J. C. Miller, mayor, Lake Mineral Wells dam imprvs., nsen & Galbraith, Cleburne, **$23,938.** J. J. Rady, Insurance Bldg., Fort engr. CD 8/5—ENR 8/12.

Location of ENR Correspondents

Symbols and Abbreviations Include:

- † Federal Government
- ★ Project of $500,000 or over
- **ENR** Engineering News-Record
- **CD** Engineering News-Record Construction Daily
- **A-E-M** Architect-Engineer-Management type of contract

Projects—By Size

Construction projects here reported cover the United States and Canada, are of these minimum sizes or larger: water supply, earthwork, waterworks, $15,000; other public works, $25,000; industrial buildings, $40,000; other buildings, $150,000.

Classes of Construction

(Named in order of Listing)

Water Supply	Unclassified
Sewers, Waste Disposal	Latin America
Bridges	Public Buildings
Streets & Roads	Commercial Buildings
Earthwork, Waterways	Industrial Buildings

Stages Reported

PROPOSED: (except Streets & Roads):

BIDS ASKED (new announcements only. For full calendar, see also preceding issues of ENR); LOW BIDDERS: On jobs below $500,000 value all low bidder news will be the final reports published on the projects involved except where award is not made to the low bidder. In this case, a supplementary contract award report will be published.

CONTRACTS AWARDED: Except awards to low bidders previously reported in low bidder stage.

Dates shown are of issue in which last previous report was published.

Note: To comply with censorship requirements, addresses on some reports are being generalized. Data which would reveal the purpose of the improvements and the size are withheld. The name of contractor and general area are reported.

CONTRACTS AWARDED

†California—U. S. Eng., 74 New Montgomery St., San Francisco, water distr. sys., drainage, paving, Job No. 1062, San Francisco Co., to Macco Constr. Co., 1517 Mission St., San Francisco. Awarded 8/27.

†Florida—U. S. Eng., 575 Riverside Ave., Jacksonville, Zone 2, water supply and distr., and sewage collection, disposal facilities, Neg-Jax-44-121, Orange Co., to Saine Co., Inc., 4511 French Ave., Jacksonville, under **$50,000.**

†Florida—U. S. Eng., 575 Riverside Ave., Jacksonville, Zone 2, water lines, Washington Co., to Gabel Constr. Co., 216 Graham Bldg., Jacksonville, Zone 1, under **$50,000.** Awarded 8/19.

†Ga., Dublin—Yards & Docks, Navy Dpt., 18 St. and Constitution Ave. N.W., Wash., D. C., elevated water tank, Naval Hospital, NOY 6749, to R. D. Cole Mfg. Co., Newman, **$28,800.**

†Ill., Great Lakes—Yards & Docks, Navy Dpt., 18 St. and Constitution Ave. N.W., Wash., D. C., water supply imprvs., Naval Training Station, NOY 7161, to Santucci, Constr. Co., Carol and LeClaire Aves., Niles Center, **$30,929.**

†Md., Annapolis—Yards & Docks, Navy Dpt., 18 St. and Constitution Ave. N.W., Wash., D. C., deep well, U. S. Naval Academy, NOY 7052, to Layne Constr. Co. Cromwell Rd. and Flanders Ave., Norfolk, Va., **$24,800.**

†N. C., New River—Yards & Docks, Navy Dpt., 18 St. and Constitution Ave. N.W., Wash., D. C., water supply, Hurst Beach, NOY 7352, to Layne Atlantic Co., Cromwell Rd. and Flanders Ave., Norfolk, Va., **$17,403.**

O., Newark — Bd. Control rehabilitating water plant, to Bass Constr. Co., 215 Birmingham Theatre Bldg., Birmingham, Mich., **$174,729.** Est. $175,000. Awarded 8/13. CD 7/15—ENR 7/22.

Pa., Wilmerding—Bd. Comrs., North Versailles Twp., A. A. Arendas, secy., Box 53, WW supply and distr. sys., along Lincoln Hy., Contr. 14, North Versailles Twp., to John Carson & Sons, 1248 Pennsylvania Ave., N. S. Pittsburgh, Zone 1. Est. **$15,000.** CD 8/5—ENR 8/15, under North Versailles Twp.

Tex., Brownsville—6 in. watermains, facilities, force account, **$16,000.**

†Utah, Orem—V. Emil Hanson, city clk., 500,000 gal. concrete lined reservoir and installing 29,300 ft. 4- to 8-in. c. i. mains, to Millins, Wheeler & Tempest, 22½ E. First So. St., Salt Lake City, Zone 1. **$78,920. FWA.** Bids 8/16. H. Price, Provo, engr.

†Washington—U. S. Eng., 800 Third Ave., Seattle, Zone 4, water supply, Contr. 869-eng-10574, Skagit Co., to Gaasland Constr. Co., Bellingham, **$30,000.**

†West Virginia—U. S. Eng., 925 New Federal Bldg., Pittsburgh, Pa., water pump. station, well pump. units, Contr. 36-058-eng-87, Berkeley Co., to F & Y Bldg. Service, 4216 E. Broad St., Columbus, O., **$30,000.**

B. C., Smithers—Dpt. Transport, Ottawa, Ont., water supply at airport, to Carter-Halls-Aldinger, Ltd., Edmonton, Alta., about **$28,000.**

Ont., Bellville—Reservoir, to H. J. McFarland Constr. Co. Ltd., Elizabeth St., Picton, **$41,867.** Gore & Storrie, 1130 Bay St., Toronto, engr. CD 7/1—ENR 7/8.

SEWERS, WASTE DISPOSAL

PROPOSED WORK

†Ill., Cartersville—City, sewerage sys. $72,618. **FWA.**

Kan., Liberal—Sewage plant addn., sewers. $100,250. Applied to FWA. Wilson & Co., Salina, engrs.

†Mo., Richland—City, sewer imprvs., Mo. 23-114. $176,000. **FWA.**

N. H., Concord—State, c/o Comptroller, State House, sewer and sewage treatment plant, State Sanatorium, Glencliff. $35,000. Metcalf & Eddy, 1300 Statler Bldg., Boston, Mass., engrs.

†N. Y., Salina—Town Superv., 117 Second St., Liverpool, completing sanitary sewerage sys. $114,640, **FWA.** Holmes & Gere, 117 James St., Syracuse, engrs. CD 8/19—ENR 8/26.

†N. C., Carolina Beach—Federal Works Agency, 601 State-Planters Bank Bldg., Richmond, 19, Va., addnl. sewerage facilities, 13,500 ft. 8 in. sewers, 4,750 ft. 6 in. laterals, 350 ft. 4 in. c.c. main, lift station, Proj. NC31-266. $18,000.

†O., Euclid—M. A. Spino, dir. Pub. Service, 585 E. 222 St., sewer from E. 222 St. and Lake Shore Blvd. to sewage disposal plant, $81,900. **FWA.** F. A. Thomas, city engr.

Pa., Phila.—Dpt. P. Wks., City Hall, installing sewer pipes, appurtenances, in northeast section city. $270,000 voted.

Tenn., Knoxville—L. C. Bailey, city engr., sewage disposal plant, $100,000.

Tex., Beeville—J. D. Hernes, mayor, sewage disposal plant, $60,000. Applied for FWA funds. Jno S. Fenner, 115 Castillo Ave., San Antonio, engr.

Tex., College Station—A. & M. College, College Station, sewage disposal plant, $25,000. Applied for FWA funds.

B. C., Dawson Creek—Sewage disposal sys. $50,000. Dpt. P. Wks., Victoria, engr.

Man., St. Boniface—Municipality, sewerage sys. imprvs. $27,000; connecting sewer overflows at Key points, $10,500.

Ont., Galt—C. T. Chesney, municipality clk., incinerator, $40,000. CD 5/26—ENR 6/3.

SEWERS, etc. (Bids Asked, Cont'd.)

Bids Asked September 7

Md., Towson—Comrs. Baltimore Co., Courthouse, approx. 3,865 lin. ft. 10 and 12 in. terra cotta sewers, manholes, necessary appurtenances. Plans deposit $5, not refunded. Geo. Wm. Stephens, Jr., Courthouse, engrs.

Mich., Dearborn—M. A. Stevens, city clk., City Hall, sewage sludge incinerator and bldg. addn. to west side sewage treatment, Greenfield Rd. $50,000.

N. Y., Glencliff — State, c/o Comptroller, Concord sewer line and sewage treatment plant, State Sanatorium. $35,000. Metcalfe & Eddy, 1300 Statler Bldg., Boston, Mass., engrs. CD 8/27—ENR 9/2.

Va., Pearisburg—City, sewerage and water sys. exten., addns. Over $40,000. R. Stuart Boyer, Real Estate Exchange Bldg., Richmond, engrs.

Bids Asked September 10

Calif., San Francisco—Dpt. P. Wks., City Hall, sewer reconstruction and paving repair on Ashbury St. between Frederick and Waller Sts. Plans deposit $10. J. J. Casey, city engr.

Bids Asked September 15

†Va., Norfolk—Federal Works Agency, 601 State Planters Bank Bldg., Richmond. Zone 19, subaqueous outfall sewer, Va. 44-325. $290,000. Greeley & Hansen, Adams Bldg., engrs. CD 8/12—ENR 8/19.

Bids Asked

†Fla., Panama City—City Addnl. sewage facilities, **$429,771, FWA.**

†Kan., Parsons—City, sewage disposal plant. $167,520. **FWA.**

LOW BIDDERS

Calif., Pasadena—City, Aug. 23, exten. West Side outfall sewer, vitr. clay pipe, from M. C. Nottingham Constr. Co., 123 N. Cloverly Ave., Temple City, **$51,726**, J. H. Allin, City Hall, engr.

†R. I., Middletown—R. C. Adams, chm. Sewer Com., Aug. 23, sewerage sys., R.I. 27-148, from Contractors Equip. & Bldrs. Supplies, 7 North Main St., Fall River, Mass., **$29,875.** Est. $36,000. **FWA.** CD 8/17—ENR 8/19.

†Tex., Nederland—H. C. Farris, mayor, sanitary sewerage sys., Tex. 41-593, from Hake Constr. Co., Commerce Bldg., Houston, **$116,841.** CD 8/5—ENR 8/12.

CONTRACTS AWARDED

Calif., Los Angeles—Bd. P. Wks., City Hall, vitr. clay sanitary sewer, Rose Ave. and Kettner Ave. Sewer Dist., to Martin Constr. Co. 721 S. Ford Blvd., **$49,782.** Bid 8/18, awarded 8/23. CD 8/26, under LB.

Massachusetts—Bethlehem Hingham Shipyard, Inc., East Howard St., Quincy, brick incinerator plant addn., to McCutcheon Co., 250 Stuart St., Boston, **$25,000.** CD 8/2—ENR 8/5.

†New Jersey—U. S. Eng., 120 Wall St., New York, N. Y., concrete waste burning pit, Somerset Co., to Marcus Friedel Co., 930 Savitt Pl., Union, **$50,000.**

†New Jersey—U. S. Eng., 120 Wall St., New York, 5, N. Y., sewer pipelines, Union Co., to Cestone Bros., Inc., 21 Cliff St., Verona, **$50,000.**

†South Carolina—U. S. Eng., 33 Customhouse, Charleston, sewage collection sys., Contr. 231-eng-1572, Greenville Co., to Boyd & Goforth, Inc., 617 N. Smith St., Charlotte, N. C., **$40,000.**

Ont., London—30 in. concrete tile main sewer in Victoria St., from Richmond St. east to Wellington St., about 612 ft., day labor, **$28,000.** R. Garrett, City Hall, engr.

BRIDGES

PROPOSED WORK

Missouri—State Hy. Dpt., Jefferson City, one 120 ft. steel truss span and three 40 ft. I-beam spans, concrete piers and creosoted pile bents, over Little Tarkio Drainage ditch, road from Craig to Mound City, Route 275. Proj. SN FA 341 H, Holt Co., C. W. Brown, Jefferson City, engr.

N. J., Brielle—Boro, Longstreet Ave., Brielle, timber, steel bridge over Dobbles Creek. $25,000. J. Van Nuys, 57 Minerva Ave., engr.

N. Y., Irving—New York Central R.R. Co., P. W. Kiefer, ch. engr., 466 Lexington Ave., New York, reconstructing railroad bridge.

Quebec—Dpt. P. Wks., Quebec City, making plans new 100 ft. concrete bridge, replacing existing wooden structure over Riviere Bleue at Riviere Bleue, about $40,000.

BIDS ASKED

Bids Asked September 7

Wis., Sheboygan—Bd. P. Wks., City Hall, repairing bridge fdns., Contr. A. constr. 45 concrete sheet piles and four 40 ft. sq. piles, Contr. B. wharf protection, fdn. imprvs. $25,000. A. L. Boley, city engr. CD 8/17—ENR 8/19.

Bids Asked September 8

Quebec—I. E. Vallee, deputy minister Dpt. P. Wks., Quebec City, reinforced bridge over North River, on Hy. 30, St. Jerusalem, near Lachute, $35,000. O. Des Jardins, Dpt. P. Wks., Quebec City, engr.

Bids Asked September 14

Florida—State Road Dpt., J. H. Dowling hy. engr., lime rock base with bituminous surface, 7 timber bridges, 13.484 mi. St. P. 5158(4), Road No. 79, Polk Co. Plans deposit $5.

Indiana—State Hy. Comn., S. C. Hadden, chn., Indianapolis, 1 span 20 ft. rein.-con. slab bridge over Martindale Ditch, State Road 209, Hancock Co.; 1 span 20 ft. rein.-con. arch bridge over Pursley Creek, Blackford Co., Plans deposit $1.75 each project; replacing 1 span 220 ft. steel truss bridge, repairs to abutments, over Mississinewa River, Grant Co.; 2 span, 32 ft. continuous rein.-con. slab bridge over Wildcat Creek, Clinton Co., Plans deposit $2.75 each project. Ray Bower, State House Annex, Indianapolis ch. engr.

Bids Asked September 16

California—State Div. Hys., Sacramento, repairing 11 timber bridges at points between Indio and Brawley, Imperial Co. G. T. McCoy, hy. engr.

LOW BIDDERS

Kentucky—State Dpt. Hys., Frankfort, Aug. 27, superstructure 0.075 mi. bridge, Breathitt Co., from Kentucky Road Oiling Co., 3 Louisville Park, Frankfort. **$43,014;** superstructure, approaches for bridge 0.445 mi. grading, drainage and surface, Lawrence Co., from L. G. Arnold, Inc., Eau Claire, Wis., **$54,021.** CD 8/2—ENR 8/5.

Que., St. Felicien—Province of Quebec, substructure for 9 span, 1,200 ft. concrete steel bridge, to J. A. Auclair, 105 Monument St., Gifford, **$171,000**, steel superstructure, from Dominion Bridge Co. Ltd., Notre Dame St., Lachine, **$135,000.** CD 7/30—ENR 8/5.

CONTRACTS AWARDED

Oklahoma—State Hy. Dpt. Capitol, Oklahoma City, rein.-con. bridges on Hy. 44, between Foss and Dill City, Washita Co., to Ottinger Bros., Petroleum Bldg., Oklahoma City. **$40,019.** Est. $45,000. B. E. Clark, Capitol, Oklahoma City, engr.

Tex., Dallas (Oak Cliff area)—Dallas Co., c/o Judge, Courthouse, 2 concrete bridges, Clarendo Dr., to Wallace & Bowden, Construction Bldg., Dallas, **$28,490.**

Tex., Dallas—Texas & Pacific Ry. Co., R. J. Gammie, ch. engr., Texas & Pacific Bldg., 300 ft. concrete, steel overpass in vicinity to No. American Aviation Plant, overall, force account, **$45,000.** CD 8/5—ENR 8/12.

Washington—State Hy. Dpt., Olympia, imprv. timber bridge, Yakima Co., to M. J. Kuney, Hutton Bldg., Spokane, **$118,232.** Bids 8/24. CD 8/11.

Ont., Owen Sound—Grey Co., Owen Sound, 25 ft. and 30 ft. span, rigid frame, rein.-con. bridges 18 ft. roadways, etc., to Ontario Bridge Co. Ltd., Crown Bldg., Toronto.

Que., Montreal—Repairing Ahuntsic Bridge Lajeunesse St., near Blvd. Gouin E., to Concrete Constr. Ltd., 1082 Decarie Blvd., **$56,475.** Technical Division, 3161 Joseph St., Verdun, engr.

STREETS AND ROADS

BIDS ASKED

Bids Asked September 7

†D. C., Wash.—Pub. Bldgs. Admin., 18 and F Sts. N.W., Zone 25, addnl. roadways at temporary Federal Office Bldgs I, J, K and L. **FWA.**

Iowa—State Hy. Comn., Ames, paving 0.231 mi. U. S. 30 west of Missouri Valley between Sects. 16 and 21 and 20, P-614, Harrison Co.; 0.380 mi. paving approaches to overhead bridge over C. B. & Q. Railroad, U. S. 34, FAGM-414-C(1), Des Moines Co.; maintenance resurfacing 13.2 mi. Iowa 100 from Storm Lake to Schaller, M-3290, Buena Vista and Sac Counties; 17 mi., Iowa 143 from Woodbury Co. line to Iowa 5, M-3291, Cherokee Co.; 20.2 mi. Iowa 35 from point 1 mi. north of Danbury to Iowa 141, 7.8 mi. Iowa 31 from Smithland to point 3 mi. north of Ote, 9.9 mi. Iowa 140 from Sloan to Iowa 141, M-3292, Monona and Woodbury Counties; maintenance bridge repairs Squaw Creek Bridge on U. S. 30 in Ames, M-1268, Story Co.

Bids Asked September 8

Kansas—State Hy. Dpt., Council Grove, resurfacing material 5.237 mi. Proj. 2553; 8.285 mi. Proj. 2590 AB; 0.748 mi. Proj. 2591 AB, all foregoing Dickinson Co.; 29.141 mi. Proj. 2595 AB, Morris Co.; 7.956 mi. Proj. 2596, Washington Co.; single asphalt surface treating 8.355 mi. Proj. 2594 AB, Mitchell Co.; 15.445 mi. Proj. 2592 AB, Jewell Co., R. C. Keeling, Topeka, engr.

Louisiana—Dpt. Hys., D. Y. Smith, dir., Baton Rouge, grading, gravel surfacing 0.222 mi. relocation State Route 55, at Twelve Mile Bayou, Shreveport-Dixie Hy., S. P. 79-01-08, Caddo Parish.

Louisiana—Dpt. Hys., D. Y. Smith, dir., Baton Rouge, 5,965 cu. yd. washed gravel to be furnished, hauled and spot dumped, SP 703-00-24, St. Helena Parish; 2,150 cu. yd. SP 703-00-24, St. Helena Parish; 2,525 cu. yd. washed gravel to be furnished, hauled and spot dumped, SP 703-00-13, Evangeline Parish; 5,460 cu. yd. washed gravel furnished and del. f.o.b. railroad cars at various sidings, SP 703-00-24, Jefferson Parish; 3,912 cu. yd. washed gravel for an alternate, 4,605 cu. yd. sand clay gravel furnished, spot dumped, SP 703-00-24, Madison Parish.

New York—State Dpt. P. Wks., Div. Hys., Albany, C. H. Sells, supt., widening 13.12 mi. roadway, Contr. DA. RC. 43-5, Seneca Co. Plans deposit $5; adv. ENR 9/2.

Wisconsin—State Hy. Comn., Madison, crushed surface course or crushed stone surface course 11.03 mi. Elroy-New Lisbon Rd., State Trunk Hy. 80, A.F.E. 29-06; 2.56 mi. Elroy-Kendall Rd., State Trunk Hy. 71, A.F.E. 29-07.

Bids Asked September 10

Kansas—State Hy. Dpt., Chanute, grading 0.119 mi. F. A. 447-E, Neosho Co.; Bridge, 50 ft. truss and 30 ft. I-Beam, F. A. 447-E, Neosho Co.

Kentucky—State Hy. Dpt., Frankfort, paving, draining low type surfacing 4.12 mi. Pineville-Jensen Rd., DA-RM 11, SP 7-14-B, Co.; 5.751 mi. Harlan-Hyden Rd., AM-P 42D(1), SP 66-32, Leslie Co.; medium surfacing 2 mi. Catlettsburg-Louisa Rd., 10-85, Part 3, Boyd Co.; bituminous resurfacing 0.06 mi. West Seventh St. in Hopkinsville, SP 24-245, Christian Co.; bituminous concrete resurfacing 2.261 mi., Eastern Parkway, SN-SP 56-58; SN-SP 56-158, SN-SP 56-[illegible], Jefferson Co.; repairing concrete pavement (patching) 6.4 mi. Lexington-Winchester Rd., MP 34-84-a, Fayette Co. CD 6/24—ENR 8/5, under CA.

Bids Asked September 14

Indiana—State Hy. Comn., S. C. Hadden, chn., Indianapolis, 6,100 sq. yd. concrete pavement repairs, approx. 38.21 mi. road, Wayne and Parke Counties; 8,600 sq. yd. on 38.97 mi. road, Whitley and Allen Counties; 6,200 sq. yd. on 23.17 mi. road, Marion, Hancock and Madison Counties; 6,800 sq. yd. on 7.16 mi. road, LaPorte Co. Plans deposit $2.75 each project. Ray Bower, State House Annex, Indianapolis, engr.

Bids Asked September 15

†Virginia—Pub. Roads Admin., Arlington County, at office H. J. Spelman, dist. engr., 1440 Columbia Pike, Arlington, access rd. Proj. VA DA WR-21 Paving 31, Henry Shirley Memorial Hy., Arlington and Fairfax Counties. **FWA.**, adv. ENR 9/2.

Bids Asked September 22

Delaware—State Hy. Dpt., Dover, concrete paving 1.572 mi. FAP DAWR-2, Contr. 1, Sussex Co. Plans deposit $2. W. W. Marvel, ch. engr.; adv. ENR 9/2.

Bids Asked

Iowa—State Hy. Comn., Ames, rejected bids Aug. 24, imprv. Proj. M-1270, Polk Co.; M-2221, Mitchell Co., maintenance bridge repair, Proj. M-1268, Story Co. CD 8/16—ENR 8/19.

Texas—State Hy. Comn., Austin, rejected bids, Aug. 10, soil cement base and surface 2.533 mi. Red River Co. $40,000. CD 8/12—ENR 8/19 under LB.

†Tex., Pasadena—D. L. Atkinson, mayor, constructing, paving 8 St., Tatar to Vista, Tex. 41-465. **$200,000. FWA.** Garrett Engineering Co., 1806 Milam St., Houston, engr.

LOW BIDDERS

Alabama—State Hy. Dpt., Montgomery, Aug. 20, imprv. 14.892 mi. Coosa Co., from Fisher Constr. Co., and The Georgia Roads Co., Fisher Bldg., Birmingham. **$114,707.** CD 8/12—ENR 8/19.

California—State Div. Hys., Sacramento, Aug. 25, imprv. 6.5 mi. San Luis Obispo, from M. W. Stanfield, Box 226, Marysville, **$36,318.** G. T. McCoy, state hy. engr. CD 8/10—ENR 8/12.

★**California**—State Div. Hys., Sacramento, Aug. 27, surface area and access rd. near Honey Lake, consisting graded area [illegible] ft wide and 9,000 ft. long, placing imported borrow from 6 to 31 in. depth, placing [illegible] mix surfacing over area 150 ft. wide x [illegible] long, paving 150 ft. wide area by 150 ft. long with rein.-con. at each end surfaced with [illegible], from Radich & Brown, [illegible] Lassen Co., from Radich & Brown, [illegible] Leandro Blvd., San Leandro. **$521,961.**

Florida—State Rd. Dpt., Tallahassee, Aug. 26, imprv. 2.45 mi., 1.85 mi. and 2.21 mi., Jackson Co., 2.4 mi., Leon Co., 2.19 mi., Calhoun Co., from J. H. Craggs Constr. Co., Ocala. **$27,637.** CD 8/18.

Indiana—State Hy. Dpt., chn., Indianapolis, Aug. 24, imprv. 1.805 mi. Marion Co., from W. D. Vogel, 3760 E. St. Clair St., Indianapolis, **$55,829, est. $66,397;** 0.261 mi., Howard Co., from Raleigh Burk, Westfield Blvd., Indianapolis, **$29,707, est.** $30,915. Rejected Aug. 8/24, imprv. 0.545 mi. Madison Co.; 1.6 mi., Dearborn Co., will readvertise. CD 8/17—ENR 8/19.

Kentucky—State Dpt. Hys., Frankfort, imprv. 3.439 mi. Metcalfe Co., from Inland Constr. Co., Burkesville, $32,991. CD 8/3—ENR 8/5, under Bridges, etc.

TREETS, etc. (Low Bidders, Cont'd.)

Maryland—State Road Comm., Baltimore, ug. 24, imprv. 0.558 mi. Aiken-Port Deposit d. Contr. CE 252-2-266, Cecil Co., from illiips Bros., Salisbury, **$65,967.** CD 8/17—NR 8/19.

Md., Baltimore—Dpt. P. Wks., Bureau ys., Aug. 18, imprv. Ashburton St., S.A. h, from American Paving & Contracting 2525 Loch Raven Rd., **$25,637,** CD 8/10 ENR 8/12.

Minnesota—State Hy. Dpt., St. Paul, Aug. furnish, crush, screen, load and haul out 28,630 cu.yd. traffic, bound crushed rock earing course, for Maintenance Dist. 12 and rushed rock base and bituminous surface eatment 8.1 mi. SP2302-96 (Trunk Hy. 16-9), om Roverud Bros., Spring Grove **$55,175** d **$103,681** respectively. CD 7/27—ENR 29.

ONTRACTS AWARDED

Ala., Mobile—Paving parkway stretches on overnment and Broad Sts., widening Spring-ill Ave., to Harbert & Cargile, Monroe Park, obile, **$92,841.** H. Fisher, city engr.

†Calif., Pleasanton—Yards & Docks, Navy pt., 18 St. and Constitution Ave. N.W., ash., D. C., paving parade grounds, Camp arks. NOY 6500, to Macco Constr. Co., reight and Ferry Sts., Oakland, **$39,500.**

†Calif., San Pedro—Yards & Docks, Navy pt., 18 St. and Constitution Ave. N.W., ash., D. C., repairing road, N.O.B., NOY 49, to Ansco Constr. Co., 2225 Atlantic Ave., ong Beach, **$68,900.**

†Colorado—U. S. Eng., 1709 Jackson St., maha, Neb., surfacing, Contr. 25-066-Eng-11, agle Co., to Brown Constr. Co., Pueblo, 0,000.

Florida—State Rd. Dpt., Tallahassee, imprv. mi. Work Order 0407, and 1.135 mi. Work rder 0307, Henry Co., and 4.902 mi. Glades , to J. H. Craggs Constr. Co., Ocala, 3,382***17.8 mi. Citrus Co. and 17 mi. Lake , also 2.95 mi. De Soto Co., and 2.05 mi. ardee Co., and 8.298 mi. Highland Co., to J. & W. L. Cobb, Inc., Box 977, Ocala, 0,316 and **$111,022** respectively***15.417 mi. ion Co., and 12.57 mi. Madison Co., to ench Constr. Co., Dothan, Ala., **$36,462** and 3,668 respectively***6.165 mi. Bay Co., to C. Moore Constr. Co., Inc., Panama City, 6,329. Grand total $361,379. Bids 8/26, warded 8/27. CD 8/18.

Ia., Mt. Pleasant—Bd. Supervs., Henry Co., aintenance surfacing various secondary roads, Roverud Bros., Spring Grove, Minn., **$41,-9.** Bids 7/28, awarded 8/19. CD 7/16—NR 7/22.

Kansas—State Hy. Dpt., Independence, prv. 6.257 mi., Montgomery Co., to Harry enery, Ottawa, **$61,808.** Bids 8/13. CD 8/16.

Kansas—State Hy. Dpt., Topeka, single as-alt surface treating 34.4 mi. and stabilizing d single asphalt surface treating 4 mi. ANR 6, Reno Co., to Broce Constr. Co., An-ony, **$51,559** and **$33,723** respectively. warded 8/19. CD 8/12—ENR 8/19, under LA.

†Louisiana—U. S. Eng., 25 St. and Avenue Galveston, Tex., concrete paving, Vernon arish, to W. R. Aldrich Co., Kalwrah Univer-y Gardens, Baton Rouge, approx. **$72,000.**

Maryland—State Roads Comm., Baltimore, ading, drainage, macadam surfacing 1.626 along section of hy. from Blue Ridge mmit to Pen Mar, Highfield Rd., Washing-n Co., to Thomas Bennett & Hunter, West-inster, **$80,499.**

Minnesota—State Hy. Dpt., St. Paul, prv. 3.4 mi. S.P. 4009-03 (Trunk Hy. 21), to J. Roth Constr. Co., 350 West ahe St., St. Paul, and W. O. Breske, 1111 Ave. S.E., Minneapolis, **$58,141.** Bids 8. CD 8/4—ENR 8/12.

Minn., Wheaton—Traverse Co., maintenance aveling various roads, to R. Warner, heaton, **$29,200.**

†Nev., Hawthorne—Yards & Docks, Navy pt., 18 St. and Constitution Ave. N.W., ash., D. C., roads NAD, NOY 6726, to Gib-ons & Reed and J. C. Compton, P.O. Box 6, **$246,000.**

†New Jersey—U. S. Eng., 120 Wall St., w York 5, N. Y., roads, grading, draining, dson Co., to V. Giancarlo Co., 233 Thomas , Lyndhurst, **$50,000.**

†North Carolina—U. S. Eng., 308 Custom-use, Wilmington, road work, Iden. 982-44-14, urham Co., to F. D. Cline, Fairview, Rd., aleigh, under **$100,000.** Awarded 8/14.

Ohio — State Hy. Dpt., Columbus, imprv. 18 mi. Clinton Co., to Clinton Constr. Co., ilmington, **$33,411,** est. $33,500***5.171 mi. ox Co., to Boyd & Cook Co., 801 Gas & ectric Bldg., Dayton, **$51,106,** est. $51,120 0.437 mi. Van Wert Co., to J. A. Ross Co., 5 Kolmer Ave. N., Chicago, Ill., **$52,325,** $52,400***0.442 mi. Wayne Co., to Holmes nstr. Co., Palmer St., Wooster, **$35,476,** est. 500. Grand total $172,318. Bids 8/17. ceived no bids Aug. 17, imprv. 3.094 mi. rry Co.; 2.263 mi. Coshocton Co. Cancelled s to have been received Aug. 17, imprv. 59 mi. Butler and Clermont Counties. CD —ENR 8/5.

O., Cleveland—Bd. Comrs. Cuyahoga Co., urt House, surfacing Pleasant Valley Rd., Cuyahoga Asphalt & Paving Co., 13125 Shaker Sq., Cleveland, **$39,392.** Est. $40,300. CD 8/5—ENR 8/12.

Oklahoma—State Hy. Comn., Oklahoma City, grading, drainage, asphalt surfacing 13.533 mi. State Hy. 33 west of Locust Grove, Mayes Co., to General Constr. Corp., Perrine Bldg., Oklahoma City, **$39,194,** est. $43,000***grading, concrete paving 0.409 mi. Franklin Ave., in Shawnee Pottawatomie Co., to Lewis Constr. Co., Muskogee, **$36,713,** est. $40,000***grading, drainage, gravel surfacing 10.78 mi. State Hy. 44 from Foss to Dill City, Washita Co., to J. H. Thomson, 204 N.W. 33 St., Oklahoma City, **$241,651,** est. $250,000. Grand total $317,-558. Bids 8/17, B. E. Clark, Capitol Office Bldg., Oklahoma City, engr.

Oregon—State Hy. Comn., Salem, imprv. 12.9 mi. Malloy Ranch-Hooker Creek Sect. I. O.N. Hy. SN-U-FAS 32-B 1, also 84 ft. rein. con. bridge, Malheur Co., to Morrison, Knudsen, 319 Bway., Boise, Idaho, **$348,823** ***0.27 mi. Lane Co., to Glenn W. Hord, Eugene, **$40,735***4.9** mi. Clatsop and Tillamook Counties, to Rogers Constr. Co., Dayton, Wash., **$84,750.** Grand total $474,308. Awarded 8/23. CD 8/16.

Washington—State Hy. Dpt., Olympia, imprv. 11.5 mi. Yakima and Benton Counties, to M. J. Kuney, Hutton Bldg., Spokane, **$123,302.** Bids 8/24. CD 8/19.

†Washington—U. S. Eng., 800 3 Ave., Seattle, Zone 4, roads, streets, Grant Co., to Woodworth & Co., and Macdonald Bldg. Co., Moses, **$200,000.**

†Washington—U. S. Eng., 800 3 Ave., Seattle 4, surfacing roads, streets, Spokane Co., to R. L. Bair, 1120 Ide Ave., Spokane, **$80,000.**

Ont., Port Arthur—Street paving, to Tomlinson Bros., Ltd., 21 E. King St., Toronto, **$60,000.**

Ont., St. Catherines—Paving Carleton St. from Ontario to Johnson Sts., day labor, **$33,365.** B. F. Lamson, City Hall, engr.

Ont., St. Thomas—Dpt. Munitions & Supply, Ottawa, resurfacing road and apron at parade ground at No. 1 Technical Training School, to Cornell Constr. Co. Ltd., 74 Dundas St., Brantford, about **$40,000.** CD 8/20—ENR 8/26.

Ont., Toronto—Leaside Co., 2,160 ft. of 28 ft. concrete pavement Wicksteed Ave. between Brentwood Rd. and Leslie St., to Rayner Constr., Ltd., 29 Commercial St., Leaside, **$37,641.** R. V. Burgess, Bessborough Dr., Leaside, clk.

Ont., Welland—Approx. 2,800 lin. ft. 30 ft. concrete pavement, curbs, gutters, to Scott-Jackson Ltd., Evans Ave., Box 38, New Toronto, **$48,241.** C. L. Carlson, city engr.

Quebec—Province of Quebec, Quebec City, reconstruction 4 mi. road on way to Charlesbourg, in Lovetteville, day labor, **$35,000,** E. Gohier, Dpt. Hys., Quebec City, engr.

Quebec—Province of Quebec, Quebec City, 4½ mi. roadway from Sillery to Quebec Bridge, in Sillery, to Union Quarries Paving Co. Ltd., 48 Second Ave., Quebec City. E. Gohier, Dpt. Roads, Quebec City, engr.

★**Quebec**—Dpt. Roads, Quebec City, grading, graveling 4.5 mi. Hy. 11, between Piedmont and Mt. Rolland, to Belmont Constr. Co. Ltd., 679 Belmont St., Montreal, **$550,000.**

Que., Arvida—Aluminum Co. of Canada, Ltd., Sun Life Bldg., Montreal, road reconstruction, day labor, **$67,000.**

Que., Montreal—J. A. Mongeau, municipality clk., concrete sidewalk on Peel St. from Sherbrooke St. to Pine Ave., to Chas. Duranceau Ltd., 5847 Hamilton Ave., **$31,020.** J. Brousseau, City Hall, engr.

Que., St. Laurent (Postal Dist. Montreal)—H. Lapointe, municipality clk., 14 Church St., street imprvs. and sidewalk, pavement curbs, day labor, **$56,000.**

EARTHWORK, WATERWAYS

PROPOSED WORK

Calif., Long Beach—Strengthening waterfront protection works for erosion control. $75,000. G. E. Baker, City Hall, engr.

Ia., Denison—Crawford Co., surveys flood control, incl. shortening Boyer River from 34.5 mi. to 20.5 mi., and moving 1,500,000 cu. yd. dirt. $25,000. W. J. Wearmouth, Denison, co. engr. CD 6/30—ENR 7/8.

Neb., North Platte and Grand Island—Buffalo Co. (Kearney), Hall Co. (Grand Island) and Merrick Co., (Central City), irrigation project covering 450,000 acres land. $100,000.

★**Tex., Rio Grande City** — International Boundary Comn., c/o J. C. Lytel, proj. engr., Farmer Bank Bldg., San Benito, 90 ft. high earthern dam across Los Almos Creek, near here. $6,853,000. J. L. Burkholder, Sr., San Benito, engr. C. M. Ainsworth & Alf. Tamm, Harlingen, consult. engrs.

Sask., Regina—Dom. Govt., Ottawa, Ont., development of Wascana Waterway, Prairie Farm Bd., 810 McCallum Hill Bldg., engr.

N. S., Canso—Dom. Government, Ottawa, Ont., dredging harbour, constructing breakwater at False Passage entrance to harbour. $60,000. Dpt. P. Wks., Ottawa, Ont., engr.

BIDS ASKED

Bids Asked September 9

Ia., Calamus—Bd. Supervs. Clinton Co., Court House, Clinton, outlet ditch, cleaning all open ditches in Drainage Dist. 7, 164,289 cu. yd. earth and 280 yd. rock exav., near here. Over $25,-000. H. O. Paulsen, Clinton, engr.

Bids Asked September 15

†California—Bureau of Reclamation, Dpt. Interior, Denver, Colo., furnishing, del. 32 guide engagement indicators, 2 for river outlet coaster gate, 2 for coaster-gate lifting frame and 28 for coaster-gate slot closures for installation on outlet works coaster gate, lifting frame and gate-slot closures to be installed at Shasta Dam, Kennett Div., Central Valley Proj., Spec. 1704-D.

Bids Asked September 27

†Washington—Bureau Reclamation, Yakima, earthwork, concrete lining, structures from Sta. 2884 plus 75 to Sta. 3314 plus 40 and Wasteway 5 at Sta. 3353 plus 34.73, Yakima Ridge Canal, Roza Div., Yakima Project, Spec. 1058, 6 mi. northwest to 1 mi. east of Sunnyside.

Bids Asked

†Massachusetts—U. S. Eng., 31 St. James Ave., Boston, (selected bidders), dredging, repairing structures, No. 19-023-44-Neg-32, Suffolk Co.

LOW BIDDERS

†Illinois-Missouri—U. S. Eng., 816 U. S. Courthouse & Customhouse, St. Louis, Zone 2, Mo., Aug. 10, bank protection, timber piling clump dikes along Mississippi river, Neg. No. 23-065-44-18, to Patton-Tully Transportation Co., P. O. Box 1133, Memphis, Tenn. Est. about **$100,000.**

Okla., Oklahoma City—City, Bluff Creek Canal, from Lippert Bros., Oklahoma City, **$234,960.** V. V. Long & Co., Colcord Bldg., engrs.

CONTRACTS AWARDED

†Arkansas—U. S. Eng., 300 Bway., Little Rock, repairing Levee Dists. 3 and 7, Conway Co., and Levee Dist 9, Pope Co., to James Downs, Tyronza, **$50,000** each.

†California—U. S. Eng., 74 New Montgomery St., San Francisco, bank protection of river. Spec. 1074, central California, to Howson Bros., Las Animas Ave., Gilroy. Awarded 8/23.

★**Calif., National City**—California Water & Telephone Co., 300 Montgomery St., San Francisco, Sweetwater Falls concrete arch dam across Sweetwater River, San Diega Co., to Macco Constr. Co., 815 Paramount Blvd., Clearwater, **$1,114,890.** Bids 8/14. CD 8/24—ENR 8/26 under LB.

†Illinois—U. S. Eng., 816 U. S. Courthouse and Customhouse, St. Louis, 2, Mo., repairing levees, about 99,000 cu. yd. earthwork, Monroe and St. Clair Counties, and rebuilding levees at various locations, Neg. 23-065-14-22, to Jos. Pohl, Nevada, Mo. Est. under **$100,000.** Bids 8/16. CD 8/16.

Ont., Beachville—Gypsum Lime & Alabastine, Canada, Ltd., 50 Maitland St., Toronto, excavating 250,000 cu. yd. rock and earth, to King Paving Co., Ltd., 6th Line, Oakville, about **$100,000.**

Que., Valleyfield—Montreal Cottons, Ltd., 710 Victoria Sq., Montreal, retaining wall, etc., to Anglin-Norcross Quebec, Ltd., 893 Sherbrooke St. W., Montreal, **$33,000.** Est. $35,000. CD 8/4—ENR 8/19.

UNCLASSIFIED

PROPOSED WORK

★**†California** — CONSTRUCTION — U. S. Eng., 74 New Montgomery St., San Francisco, construction at military installation, San Francisco Co. Approx. $3,000,000.

†California—RAILROAD SPUR—U. S. Eng., 74 New Montgomery St., San Francisco, railroad spur, Job No. 973-1, San Francisco Co.

†Fla., Jacksonville—NAVAL AIR STATION IMPROVEMENTS—Yards & Docks, Navy Dpt. 18 St. and Constitution Ave. N.W., Wash., D. C., engineering services by Lockwood Greene Engineers, Inc., 10 Rockefeller Center, New York, N. Y., in connection with NOY 5947, naval air station imprvs., NOY 7358.

Illinois-Missouri—PIPELINE—Ajax Pipeline Corp., Nat'l. Bank, Tulsa Bldg., Tulsa, Okla., constructing, completing 10¾ in. pipeline across Mississippi River from Madison Co., Ill., to St. Charles Co., Mo. $25,000.

†Kansas—IMPROVEMENTS—U. S. Eng., 10 E. 17 St., Kansas City, Mo., imprvs., Cowley Co. Under $500,000.

Louisiana—OIL PIPELINE—The Tide Water Associated Oil Co., Mellie Esperson Bldg., installation, maintenance 7 in. pipeline to cross Tante Phine Pass, Plaquemine Parish.

Louisiana—OIL WELL—Dancigerr Oil Co., W. T. Waggoner Bldg., Ft. Worth, Tex., oil well, Evangeline Parish.

Louisiana—OIL WELL—H. G. Nelms & Associates, Shreveport, developing deep test oil well, Concordia Parish.

UNCLASSIFIED (Proposed Work, Cont'd.)

Louisiana—OIL WELL—Triangle Drilling Co., Ardis Bldg., Shreveport, drilling, developing deep oil well, Bossier Parish.

Louisiana—OIL WELL DRILLING BARGE, etc.—The Texas Co., 919 St. Charles St., New Orleans, installations, maintenance drilling and boiler barges, appurtenant structures for drilling exploratory well for oil production, Iberia Parish.

La., Shreveport—OILWELL—C. H. Bigby & Associates, Ardis Bldg., Shreveport, developing oil well, Natchitoches Parish.

Mass., Haverhill—RAIL SALVAGE—City, City Hall, street car rails removal on certain streets, $80,000. Morse, Dickinson & Goodwin, 25 Washington Sq., engrs.

Minn., Austin—IMPROVEMENTS—City, J. H. Welland, clerk., imprvs., involving 300,000 cu. yd. grading, administration bldg., etc. Over $75,000. E. B. McDonough & A. W. Nelson, 335 Minnesota St., St. Paul, engrs. CD 3/2/42—ENR 3/4/42.

Minn., Marshall — IMPROVEMENTS — Municipal imprvs. Over $25,000. P. C. Bettenberg & Co., 1437 Marshall Ave., St. Paul, engr.

★**†Nebraska** — IMPROVEMENTS — U. S. Eng., 1709 Jackson St., Omaha, imprvs., Custer Co. Approx. $500,000.

★**†Nebraska**—IMPROVEMENTS—U. S. Eng., 1709 Jackson St., Omaha, imprvs., Page Co. $1,000,000.

†Nebraska—IMPROVEMENTS—U. S. Eng., 1709 Jackson St., Omaha, imprvs., bldgs., etc., Scottsbluff Co. Under $100,000.

†N. Y., Montauk Point—IMPROVEMENTS—Yards & Docks, Navy Dpt., 18 St. and Constitution Ave. N.W., Wash., D. C., engineering services by Lockwood Greene Engineers, Inc., 10 Rockefeller Plaza, New York, N. Y., imprvs., in connection with NOY 5927.

N. C., Gastonia—IMPROVEMENTS—Harry Rutter, city mgr., making plans, imprvs. $200,000. P. T. Withers, city engr.

S. D., Rapid City—SWIMMING POOL—Municipal swimming pool, $30,000.

Tenn., Memphis — AIR TERMINAL — W. Chandler, mayor, Court House, air terminal, Mud Island.

★**Tenn., Nashville** — CONTROL TOWER, etc.—Nashville, Chattanooga & St. Louis Ry., R. L. Schmid, ch. engr., 930 Bway., furnishing, installing control tower and control sys. from Glencliff, near Nashville to Chattanooga, $500,000.

Texas—OIL WELL—Cardinal Oil Co., Stamford, drilling, developing deep test oil well, Jones Co.

Texas—OIL WELL—Cities Service Oil Co., M. Esperson Bldg., Houston, 8,000 ft. oil well test, Harris Co.

Texas—OIL WELL—Dirks Bros. et al, Beeville, drilling, casing, developing new 7,700 ft. test oil well, Bee Co.

Texas—OIL WELL—Humble Oil & Refining Co., Humble Bldg., Houston, drilling, casing, developing 10,500 ft. oil well, etc.

Texas—OIL WELL—Magnolia Petroleum Co., Esperson Bldg., Houston, and J. S. Abercromble, drilling, casing, developing new 13,500 ft. test oil well. $25,000.

Texas—OIL WELLS—Standard Oil Co. of Kansas, Esperson Bldg., Houston, drilling, developing deep test oil wells Willmar Field, Willacy Co.

Tex., Alice—OIL WELL—W. L. Goldston, et al, drilling, casing, developing 5,600 ft. test oil well.

Tex., Alice—OIL WELL—Magnolia Petroleum Co., Esperson Bldg., Houston, drilling, developing new 7,000 ft. oil well.

Tex., Angleton—OIL WELL—Earnest Cockrell & Assoc., N. Esperson Bldg., Houston, 3,500 ft. oil well.

Tex., Belknap—OIL WELL—Belfast Oil Co., Wichita Falls, 5,100 ft. oil well.

Tex., Cadena—OIL WELL—Taylor Refining Co., Taylor, drilling, casing, developing new 6,250 ft. oil well.

Tex., Canton—OIL WELL—Superior Oil Co. of California, Marshall, drilling, developing oil well.

Tex., Carthage—OIL WELL—Feazel & Kingsey, Commercial National Bank Bldg., Shreveport, La., 6,000 ft. test oil well.

Tex., Cistern—OIL WELL—Continental Oil Co., Eagle Ford Bldg., Dallas, 8,000 ft. oil well, necessary piping for water used in drilling, storage facilities for field oil. $25,000.

Tex., Concord—OIL WELL—Carter-Gragg Oil Co., Palestine, drilling, developing 5,000 ft. oil well.

†Tex., Corpus Christi— NAVAL AIR STATION IMPROVEMENTS — Yards & Docks, Navy Dpt., 18 St. and Constitution Ave. N.W., Wash., D. C., engineering services by Harvin Moore & J. E. Ward, 2008 West Alabama Ave., Houston, in connection with completion NOY 5945, naval air station imprvs., NOY 7346.

Tex., Danbury—OIL WELL—Rowan Drilling Co., Commerce Bldg., Houston, 4,000 ft. test oil well.

Tex., El Campo—OIL WELL—Jack F. Hutchins & Associates, El Campo, drilling, developing 4,000 ft. oil well.

Tex., Encino—OIL WELL—Union Oil Co. of California, United Gas Bldg., Houston, developing new 10,000 ft. oil well test.

Tex., Fairfield—OIL WELL—Wheelock-Collins, Fairfield, developing new 6,000 ft. oil well. $25,000.

Tex., Friendswood—OIL WELL—Humble Oil Co., Humble Bldg., Houston, drilling, casing, developing deep test oil well.

Tex., Gonzales—OIL WELL—Amerada Petroleum Corp. and Alder Oil Co., Esperson Bldg., Houston, drilling, casing, developing oil well. $25,000.

Tex., Haskell—OIL WELL—Humble Oil & Refining Co., Humble Bldg., Houston, drilling, casing, developing oil well.

Tex., Helena—OIL WELL—Clark & Cowden, et al., Karnes City, drilling, casing, developing deep test oil well.

Tex., Henrietta—OIL WELL—Consolidated Oil Co., c/o Oil Twr. Pet. Bldg., Dallas, drilling 6,840 ft. oil well.

Tex., Hillister—OIL WELL—Humble Oil Co., Humble Bldg., Houston, developing oil well. $25,000.

Tex., Hull—OIL WELL—General Crude Oil Co., Esperson Bldg., Houston, drilling, developing 9,000 ft. oil well test.

Tex., Lamesa—OIL WELL—Seaboard Oil Co., Commerce Bldg., Houston, drilling, developing new deep test oil well. $25,000.

Tex., Leesburg—OIL WELL—H. Moss, et al, 1st Natl. Bank Bldg., Dallas, drilling, casing, developing deep test oil well.

Tex., Louise—OIL WELL—W. Stewart Boyle & Assoc., State N. Bank Bldg., Houston, developing new 6,150 ft. oil well.

Tex., Louise—OIL WELL—Salt Dome Oil Co. of Houston, Esperson Bldg., Houston, drilling, casing, developing new 5,500 ft. oil well.

Tex., Matagorda—OIL WELL—Tidewater Associated Oil Co., M. Esperson Bldg., Houston, 11,000 ft. test oil well.

Tex., Menard—OIL WELL—C. H. Murdock & Assoc., Menard, drilling, developing oil well.

Tex., Merkel—OIL WELL—Lewis Production Co., Milam Bldg., San Antonio, drilling, developing 2,750 ft. oil well.

Tex., Midfield—OIL WELL—Sun Oil Co., First National Bank Bldg., Dallas, 11,000 ft. oil well test.

Tex., Mineral—OIL WELL—H. E. Dirks & Associates, Beeville, drilling, developing new 8,000 ft. oil well test.

Tex., Monahans—OIL WELL—Stanolind Oil & Gas Co., Fair Bldg., Fort Worth, 6,500 ft. test oil well and storage facilities.

Tex., Mt. Vernon—OIL WELLS—Gulf Oil Co., Gulf Bldg., Houston, drilling, developing 1 or more oil wells. Over $25,000.

Tex., New Ulm—OIL WELL—Sinclair Prairie Oil Co., Fair Bldg., Fort Worth, drilling, developing deep test oil well.

Tex., O'Brien—OIL WELL—Humble Oil & Refining Co., Humble Bldg., Houston, drilling, developing oil well.

Tex., Pearland—OIL WELL—Rowan Drilling Co., Commerce Bldg., Houston, drilling, casing, developing new 7,000 ft. oil well. $25,000.

Tex., Sejita—OIL WELL—H. W. Bass & Transwestern Oil Co., Milam Bldg., San Antonio, drilling, developing new 6,000 ft. test oil well.

Tex., Smiths Point—OIL WELL—Standard Oil Co. of Texas, Petroleum Bldg., Houston, drilling, developing 9,500 ft. test oil well.

Tex., South Buckeye—OIL WELL—United North & South Development Co., M. Esperson Bldg., Houston, drilling, casing, developing 9,500 ft. test oil well.

Tex., Three Rivers—OIL WELL—H. B. Zachry & Associates, P. O. Box 596, San Antonio, drilling, casing, developing new 7,500 ft. oil well.

Tex., Tyler—OIL WELL—Skelly Oil Co., M. Esperson Bldg., Houston, developing 10,000 ft. test oil well.

Tex., Waelder—OIL WELLS—H. H. Coffield & Associates, Luling, skidding rig and drilling, developing 2 new oil wells.

Tex., Wichita Falls—OIL WELL—A. R. Dillard & Associates, Wichita Falls, drilling 5,800 ft. oil well. $25,000.

Tex., Whitharral—OIL WELL—Woodley Petroleum Co., Levelland, drilling, developing 6,200 ft. oil well, $25,000.

Tex., Zelia—OIL WELL—Quintana Petroleum Corp., Starling Bldg., Houston, drilling, casing, developing oil well.

†Wash., Spokane — AIRPORT RUNWAY — Civil Aeronautics Admin., Boeing Field, Seattle, Zone 8, 5,000 ft. runway, extens. 2 others at Deer Park Airport, near here.

★**Puerto Rico**—HYDRO-ELECTRIC PROJECT—Puerto Rico Water Resources Auth. plans hydro-electric project on Coanillas River, generating about 61,000,000 KVH electric energy a year. $6,000,000.

B. C., Vancouver—WHARF, etc.—W. Mancheons, Ltd., Coal Harbour, Burrard Inlet, wharf, etc. $35,000.

Man., Winnipeg—PARK, etc.—Municipality park and sports area, site between Kingsway and Victoria high school. $190,000.

N. B., Blissville—IMPROVEMENTS—Dpt. Transport, Ottawa, Ont., addnl. imprvs. development, $200,000.

N. B., Moncton—IMPROVEMENTS—Dominion Govt., Ottawa, Ont., exten., imprvs. $200,000. Dpt. Transport, Ottawa, Ont., engr.

N. S., Pugwash—WHARF, etc.—Dominion Govt., Ottawa, Ont., wharf and coal loading facilities. $35,000. Engineer, c/o Provincial Development & Rehabilitation Comn., Halifax.

Que., Gaspe—PARK IMPROVEMENTS—Province of Quebec, Quebec City, completion Gasperian National Park imprvs., $50,000. Dpt. Lands & Forests, Quebec City, engr.

Saskatchewan—RADIO RANGE STATION—Dom. Government, Ottawa, Ont., radio range stations at Saskatoon, North Battleford and Lloydminster. $200,000 (voted). Trans-Canada Airlines, 355 McGill St., Montreal, Que., engr.

BIDS ASKED

Bids Asked September 6

Sask., Buttress—COAL COMPOUND—Dept. Munitions & Supply, Ottawa, Ont., coal compound, one half double hangar, control tower on hangar, etc., for Dpt. Natl. Defense (Air), Ottawa, Ont. About $90,000.

Bids Asked September 7

†Conn., Windham—AIRPORT—Civil Aeronautics Admin., Box 636, LaGuardia Field, Jackson Heights, N. Y., airport, clearing, grading, drainage work, paving, etc., extension of runway 150x1, 315 ft., taxiway 50x2, 470 ft. Proposal 14-223. Plans deposit $10 ea. set.

N. S., Sydney — IMPROVEMENTS — Dpt. Transport, Ottawa, Ont., addnl. development imprvs., grading, base construction, reinf. con. bombing up and parking areas, drainage and road construction, about $125,000.

Bids Asked September 15

New York—ELECTRICAL LINES—Chautauqua - Cattaraugus Electric Co-Operative, Inc., Cherry Creek, 103 mi. rural electrical lines, Cattaraugus and Chautauqua Counties, $176,000. Ralph L. Woolpert Co., 132 N. Main St., Dayton, O., engrs.

Bids Asked September 17

†Alabama—IMPROVEMENTS—U. S. Eng., Grant St. west of Westwood St., Mobile, imprvs., bldgs., etc., Inv. 569-44-56, Mobile Co. Extended date. CD 8/23—ENR 8/26.

Bids Asked

†New Hampshire—WHARF—U. S. Eng., 11 St. James Ave., Boston, Mass. (selected list bidders), concrete, timber wharf exten. No. 19-023-44-NEG 37, Rockingham Co. $50,000.

†Texas—END-LOADING RAMPS, etc.—U. S. Eng., Fort Sam Houston, end-loading ramps, bldgs., facilities, etc., Coryell Co.

†Texas—IMPROVEMENTS—U. S. Eng., 17 St. and Avenue F, Galveston, imprvs., addnl. storage facilities, Sol. 359-44-C25, Travis Co. Over $25,000.

†Texas—MOTOR POOL FACILITIES—U. S. Eng., Fort Sam Houston, motor pool facilities, Bell Co.

Tex., High Island—OIL WELL DERRICKS—Stanolind Oil & Gas Co., Esperson Bldg., Houston, replacement 25 or more steel oil well derricks. Over $40,000.

LOW BIDDERS

★**†Calif., Alturas**—AIRPORT—Civil Aeronautics Admin., 1500 4 St., Santa Monica, Aug. 25, airport, schedule 1, from N. A. Moore, 2455 Sherwood Rd., San Marino, $744,770; schedule 2, from Larsen Bros., and Harms Bros., Rt. 4, Box 2220, Sacramento, $490,706.

★**†Fla., Titusville-Cocoa**—AIRPORT—Civil Aeronautics Admin., Municipal Airport, Atlanta, Ga., Aug. 5, airport grading, from Simpson Constr. Co., Daytona Beach, $405,626; paving, from John Monaghan, Inc., Pelham, Ga., **$498,958.** CD 7/28.

†Louisiana—IMPROVEMENTS—U. S. Eng., 25 St. and Avenue F, Galveston, Tex., Aug. 16, imprvs., roads, Solic. No. 359-44-C12. Beauregard Parish, from Horton-Pollard, Bossier, about **$30,000.** CD 8/16, under Roads.

★**†N. J., Woodbine**—AIRPORT—Civil Aeronautics Admin., La Guardia Field, Jackson Heights, N. Y., Aug. 27, airport imprvs., from Grand View Co., 6 Grand View Ave., Mt. Vernon, N. Y. **(1) $215,699 (2) $353,000 (1 and 2) $568,699.** CD 8/23—ENR 8/26.

CONTRACTS AWARDED

†Alabama—IMPROVEMENTS—U. S. Eng., Grant St. west of Westwood St., Mobile, imprvs., bldg., Inv. 569, 44-38, Mobile Co., to Foster & Creighton Co., American National Bank Bldg., Nashville, Tenn. Bids 8/16.

†Alabama—MOCK WAR TRAINING FORTIFICATIONS—U. S. Eng., Grant St. west of Westwood St., Mobile, mock war training fortifications, Inv. 569-44-36, Dale Co., to Henderson, Black & Green Co., Troy. Est. **$40,000.** Bids 8/12.

CLASSIFIED (Contracts Awarded, Cont'd.)

California — EXTERNAL SECURITY MEASURES—U. S. Eng., 74 New Montgomery St., San Francisco, external security measures, Proj. No. 1073, northern California, to Macco Constr. Co., 815 Paramount Blvd., Clearwater. Awarded 8/20.

California—IMPROVEMENTS—U. S. Eng., 1 S. Figueroa St., Los Angeles, Zone 14, imprvs., No. 203C, San Bernardino Co., to Mead & O'Donnell, 7769 Melrose Ave., Los Angeles, between **$20,000-$30,000.**

Calif., El Toro—COMBAT TRAINING POOL—Yards & Docks, Navy Dpt., 18 St. and Constitution Ave. N.W., Wash., D. C., combat training pool, US MCAS, NOY 6518, to James I. Barnes Constr. Co., Santa Monica, **$300.**

Calif., Hunters Point—RAILROAD TRACK—Yards & Docks, Navy Dpt., 18 St. and Constitution Ave. N.W., Wash., D. C., railroad track exten., NOY 6268, to A. D. Shader, 144 Spear St., San Francisco, **$97,482.**

Calif., Oakland — HANGAR SPRINKLER SYSTEM—Yards & Docks, Navy Dpt., 18 St. and Constitution Ave. N.W., Wash., D. C., sprinkler system for hangar, NAAS, NOY 7[illegible], to Viking Automatic Co., 216 Pine St., San Francisco, **$70,950.**

Connecticut — HANGAR—Chance Vought Aircraft Div. United Aircraft Corp., 550 Main St., Stratford, concrete steel double deck hangar, to Edwin Moss & Son, Inc., 555 Grant St., Bridgeport. Est. under **$1,000,000.** Albert Kahn Associated Engineers & Architects, Inc., 345 New Center Bldg., Detroit, arch., engrs. CD 8/13—ENR 8/19.

Conn., Hartford—STEEL RAILS—Bd. Contr. Supply, 550 Main St., Hartford, salvaging 12,000 lin. ft. 6,500 tons steel rails on certain streets, to Heron Todd Constr. Co., 1331 Half St. S.E., Wash., D. C., **$99,500.** Robert J. Ross, City Hall, engr.

Florida—CLEARING, etc.—U. S. Eng., 575 Riverside Ave., Jacksonville, Zone 2, clearing, grubbing, excav., etc., Charlotte Co., to John J. Ballenger Constr. Co., Lakeland, **$100,000.** Awarded 8/19.

Florida—FACILITIES—U. S. Eng., Grant St. west of Westwood St., Mobile, Ala., addnl. facilities, Leon Co., to Paul Smith Constr. Co., 320 Rome Ave., Tampa, Zone 1, approx. **$50,000.** Awarded 8/23.

Florida—RANGES, etc.—U. S. Eng., 575 Riverside Ave., Jacksonville, Zone 2, ranges, miscellaneous construction, Lee Co., to Southern States Constr. Co., Congress Bldg., Miami, Zone 1, under **$50,000.** Awarded 8/23.

Florida—RANGES—U. S. Eng., 575 Riverside Ave., Jacksonville, Zone 2, ranges, Polk Co., to Cleary Bros. Constr. Co., Georgia Ave., West Palm Beach, under **$50,000.** Awarded 8/19.

Florida—TRAINING FACILITIES—U. S. Eng., 575 Riverside Ave., Jacksonville, Zone 2, addnl. training facilities, Neg-Jax-44-127, Duvale Co., to Powers & Archibald, Inc., 207 Harvey Bldg., West Palm Beach, under **$50,000.** Awarded 8/24.

Fla., Jacksonville—WARM-UP APRONS—Yards & Docks, Navy Dpt., 18 St. and Constitution Ave. N. W., Wash., D. C., warm-up aprons exten., NAAS, NOY 7011, to R. H. Wright & Son, Columbus, Ga., **$207,580.**

Ill., Chicago—AVIATION FACILITIES—Yards & Docks, Navy Dpt., 18 St. and Constitution Ave., N.W., Wash., D. C., addnl. aviation facilities, NATTC, 87th St. and Anthony Ave., NOY 6304, to Gerhardt & Meyne Inc., 78 Dearborn St., **$25,691.**

Kansas—COAL BINS—U. S. Eng., 10 E. 17 St., Kansas City, Mo., coal bins, Geary Co., to Anderson & Grundeman, Soldier, Kan., under **$100,000.**

Kansas—IMPROVEMENTS—U. S. Eng., 10 E. 17 St., Kansas City, Mo., imprvs., bldgs., Marion Co., to Stephens-Brown Co., B. M. A. Bldg., Kansas City, Mo. Est. under **$50,000.**

Kansas—IMPROVEMENTS—U. S. Eng., 10 E. 17 St., Kansas City, Mo., imprvs., bldgs., Dickinson Co., to Johnson, Peterson, Bussem & Rauh, Salina. Est. under **$100,000.**

Massachusetts — IMPROVEMENTS — U. S. Eng., 819 Industrial Trust Bldg., Providence, R. I., imprvs., No. 44-11, Bristol Co., to Carlo Manchi & Co., Inc., 24 Union Ave., Framingham, Mass. Est. **$50,000-$100,000.** CD 8/12—ENR 8/19.

Massachusetts — IMPROVEMENTS — U. S. Eng., 819 Industrial Trust Bldg., Providence, R. I., imprvs., paving, No. 44-8, Franklin Co., to M. DeMatteo Constr. Co., 71 Blue Hill Pkwy., Milton. Est. **$100,000-$500,000.** CD 8/5.

Michigan — MOTOR POOL PARKING AREA—U. S. Eng., 700 Union Guardian Bldg., Detroit, motor pool parking area, Jackson Co., to Chenev Wright Co., Williamston. Under **$1,000,000.**

Mississippi—RANGE FACILITIES—U. S. Eng., Grant St. west of Westwood St., Mobile, Ala., range facilities, Harrison Co., to J. L. Knost, Meridian. About **$200,000.**

Missouri—WASH RACK, etc.—U. S. Eng., 1 U. S. Courthouse & Customhouse, St. Louis, Zone 2, concrete enclosed wash rack and heating facilities, St. Louis Co., to Gamble Constr. Co., 620 Chestnut St., St. Louis, Zone 1. Est. **$8,900.**

★**Nebraska**—IMPROVEMENTS—U. S. Eng., 1709 Jackson St., Omaha, imprvs., Clay Co., to Roberts Constr. Co., 1018 Terminal Bldg., Lincoln. Est. approx. **$500,000.**

★**Nebraska**—IMPROVEMENTS—U. S. Eng., 1709 Jackson St., Omaha, imprvs., Dodge Co., to A. Borchman Sons, 4601 Douglas St., Omaha. Est. approx. **$50,000.**

★**Nebraska**—IMPROVEMENTS—U. S. Eng., 1709 Jackson St., Omaha, imprvs., Fillmore Co., to Dobson & Robinson, 823 First Natl. Bank Bldg., Lincoln. Est. approx. **$500,000.**

★**Nebraska**—IMPROVEMENTS—U. S. Eng., 1709 Jackson St., Omaha, imprvs. Hall Co., to Booth-Olson, Inc., 622 Insurance Exchange Bldg., Sioux City, Ia. Est. approx. **$500,000.**

Nebraska — OUTSIDE UTILITIES — U. S. Eng., 1709 Jackson St., Omaha, outside utilities, Hall Co., to O. Mann, Rapid City, S. D. Est. approx. **$50,000.**

★**Nebraska**—IMPROVEMENTS—U. S. Eng., 1709 Jackson St., Omaha, imprvs., Redwillow Co., to Peter Kiewit Sons Co., 1024 Omaha Natl. Bank Bldg., Omaha, Neb. and Big Horn Const. Co., Sheridan, Wyo. Est. approx. **$500,000.**

★**Nebraska**—IMPROVEMENTS—U. S. Eng., 1709 Jackson St., Omaha, imprvs., Thayer Co., to Abel Constr. Co., 900 N. 16 St., Lincoln. Est. approx. **$500,000.**

New Jersey—AIR-CONDITIONING SYSTEM—U. S. Eng., 120 Wall St., New York, N. Y., air-conditioning sys., Middlesex Co., to Mance Air Conditioning Corp., 1841 Bway., New York, N. Y. **$50,000.**

New Jersey — LIGHTING PROTECTION SYSTEM—U. S. Eng., 120 Wall St., New York, N. Y., lighting protection sys., Hudson Co., to Hartensteine Zane Co., 225 Bway., New York, N. Y. **$50,000.**

New Jersey—RAILROAD WORK—U. S. Eng., 120 Wall St., New York, 5, N. Y., addnl. railroad work, Hudson Co., to J. Rich Steers, 17 Battery Pl., New York, N. Y. **$200,000.**

New York — FACILITIES — U. S. Eng., Chimes Bldg., Syracuse, installing facilities, Contr. 321-eng-978, Oneida Co., to Cleveland Tramrail Syracuse Co., Syracuse Bldg., Syracuse, **$100,000.**

New York—SPRINKLER SYSTEM—U. S. Eng., Chimes Bldg., Syracuse, installing sprinkler sys. Contr. 321-eng-981, Erie Co., to Globe Automatic Sprinkler Corp., Curtiss Bldg., Buffalo, **$50,000.**

N. Y., Buffalo — AIRPORT — Civil Aeronautics Admin., LaGuardia Field, Jackson Heights, New York, airport imprvs., to Poirier & McLane Corp., 33 W. 42 St., New York, **$122,652.** Bids 7/13. CD 8/9.

★**N. Y., Newburgh**—FLOATING DRY DOCK—Yards & Docks, Navy Dpt., 18 St. and Constitution Ave. N.W., Wash., D. C., 18,000 ton floating dry dock, NOY 7386, to Chicago Bridge & Iron Co., 1305 W. 105 St., Chicago, Ill.

North Carolina—IMPROVEMENTS—U. S. Eng., 308 Customhouse, Wilmington, imprvs., Iden, 982-44-15, Forsyth Co., to J. R. Bennett, Winston-Salem, under **$50,000.** Bids 8/17.

North Carolina—IMPROVEMENTS—U. S. Eng., 308 Customhouse, Wilmington, imprvs., No. 982-44-12, New Hanover Co., to F. D. Cline, Fairview Rd., Raleigh, under **$50,000.** Bids 8/12.

North Carolina — SWIMMING FACILITIES—U. S. Eng., 308 Customhouse, Wilmington, improvised swimming facilities, Iden, 982-44-16, Richmond Co., to R. F. Kirkpatrick & Sons, Burlington, under **$50,000.** Bids 8/16.

★**Ohio**—CONSTRUCTION—U. S. Eng., 6 and Walnut Sts., Phila., Pa., construction of military installation, Trumbull Co. to Herman Holmes, Crystal Falls, Mich., over **$1,000,000.**

Oklahoma—FACILITIES—U. S. Eng., 416 Wright Bldg., Tulsa, Zone 2, addnl. facilities, Contr. 957-eng-2062, Tulsa Co., to Ottinger Bros., Petroleum Bldg., Oklahoma City, **$50,000.**

Okla., Durant—HANGAR, etc.—Yards & Docks, Navy Dpt., 18 St. and Constitution Ave. N.W., Wash., D. C., hangar, mess hall, garage and warm-up platform, Auxiliary Air Facility, NOY 6672, to Ross Constr. Co., Box 1014, San Angelo, Tex., **$226,991.**

Tennessee — FACILITIES — U. S. Eng., Grant St. west of Westwood St., Mobile, Ala., addnl. facilities, Shelby Co., to Bowyer & Johnson, Jackson, approx. **$26,000.**

Texas—CONSTRUCTION—U. S. Eng., 231 W. Main St., Denison, addnl. construction, Palo Pinto Co., to James I. Barnes Constr. Co., Construction Bldg., Dallas. **$45,000.**

Texas—HANGAR—Yards & Docks, Navy Dpt., 18 St. and Constitution Ave. N.W., Wash., D. C., hangar, Kingsville Field, NOY 7666, to W. S. Bellows Co., Box 866, Corpus Christi.

Texas—IMPROVEMENTS—U. S. Eng., Fort Sam Houston, imprvs., drainage, paving, grounds development, Bexar Co., to Cage Bros. and J. F. Malcolm, Bishop. Approx. **$59,000.**

Texas — IMPROVEMENTS—U. S. Eng., Fort Sam Houston, imprvs., grounds development, drainage, paving, Gonzales Co., to Cage Bros. and J. F. Malcolm, Bishop. Approx. **$68,000.**

Texas—OIL WELL—Ralph E. Fair, Inc., Milam Bldg., San Antonio, drilling, casing, developing, new 5,000 ft. oil well, to Wiegand Bros. Drilling Co., Milam Bldg., San Antonio, approx. **$25,000.**

Texas—SHIPYARD BLDG.—Pennsylvania Shipyards, Inc., Beaumont, community service and products storage bldgs., facilities, to O. W. Collins, 2048 Proctor, Pt. Arthur, approx. **$45,000.**

Tex., Conroe—HANGAR, etc.—Yards & Docks, Navy Dpt., 18 St. and Constitution Ave. N.W., Wash., D. C., hangar, mess hall, garage and warm-up platform, NOY 6673, to Ross Constr. Co., Box 1014, San Angelo, **$274,007.**

Tex., Corpus Christi—PLUMBING AND ELECTRICAL WORK—Yards & Docks, Navy Dpt., 18 St. and Constitution Ave. N.W., Wash., D. C., plumbing work, Naval Air Station, NOY 7364, to Corpus Christi Plumbing Co., 817 S. Staples St., electrical work, NOY 7365, to Broome Electric Constr. Co., 1007 Harrison St., Amarillo.

Tex., Ebanos—GATHERING PIPELINE—McBride Refining Co., c/o H. L. McBride, Edinburg, gathering pipeline sys. to transport crude oil from fields and deliver to refineries, force account. **$70,000.**

Tex., Gause—OIL WELL—Standard Oil Co. of Texas, Esperson Bldg., Houston, drilling, developing 6,000 ft. oil well, to Prince Bros., Electra. Est. **$25,000.** CD 7/16—ENR 7/29.

Tex., Keller—OIL WELL—Jess Martin & Associates, Ft. Worth, drilling, developing new 7,300 ft. oil well, to Taubert & McKee, Petroleum Bldg., Ft. Worth, apprx. **$25,000.**

Tex., Kemper Station—PIPELINE GATHERING SYSTEM—Humble Pipe Line Co., Humble Bldg., Houston, 14 mi. 4 in. steel pipeline gathering sys., force-account. **$50,000.** CD 8/25.

Washington—COAL DOCK—Pub. Housing Auth., NHA, Skinner Bldg., Seattle, Zone 1, coal dock to supply housing, to General Constr. Co., 3840 Iowa St., Seattle, **$47,500.**

★**Washington** — CONSTRUCTION — U. S. Eng., 800 3 Ave., Seattle, Zone 4, construction at military installation, King Co., to Woodworth & Co., Inc., and MacDonald Building Co., 1517 S. Tacoma Way, Tacoma, over **$2,000,000.**

B. C., Burnaby (Postal District Vancouver)—CLEARING, etc.—Owner, c/o contractor, clearing, grading site, to A. Horie Constr. Co., Ltd., 146 E. 2 Ave., Vancouver, **$30,000.**

Newfoundland, Gander—IMPROVEMENTS—Dpt. Transport, Ottawa, Ont., developing imprvs., clearing, stumping, grading, smoothing, drainage, hard surface runway, to McNamara Constr. Co. Ltd., Industrial St., Toronto, Ont., about **$285,000.**

★**Newfoundland, Tor Bay** — IMPROVEMENTS—Dpt. Transport, Ottawa, Ont., developing imprvs., clearing, stumping, grading, smoothing, hard surface runway and drainage, to McNamara Constr. Co. Ltd., Industrial St., Toronto Ont., about **$840,000.**

Ont., Armstrong — IMPROVEMENTS—Dpt. Transport, Ottawa, Ont., developing imprvs., hard surface runways and drainage, to Storms Contracting Co. Ltd., 49 Givens St., Toronto, about **$93,000.**

Ont., Ft. William—HANGAR, etc.—Canadian Car & Foundry Ltd., 621 West Craig St., hangar and firing butts, to Barnett & McQueen Co. Ltd., Fort William, C. D. Howe & Co. Ltd., P. U. Bldg., Port Arthur, engr.

Ont., Malton—GRADING and TAXI STRIP—Victory Aircraft Ltd., Malton, grading and taxi strip, to Godson Contracting Co., Ltd., 203 W. Richmond Ave., Toronto, **$61,000.**

Ont., Oakville—WATER FRONT REPAIRS—C. H. Byers, municipality clk., repairing waterfront, to Russell Constr. Co. Ltd., 501 Harbour Comm. Bldg., Toronto, **$32,450.** CD 6/15—ENR 6/17.

Ont., Ottawa — DAM — Dom. Government, Ottawa, repairing Fryer's Island dam, to Gunite Co. Of Canada Ltd., 1405 Peel St., Montreal, Que. Est. **$25,000.** Dpt. P. Wks., Ottawa, engrs.

Quebec—LIGHTHOUSE PIER—Dpt. Transport, Ottawa, Ont., repairing Lighthouse Pier at Ile Aux Candres (opposite Baie St. Paul), St. Lawrence River, to Creaghan & Archibald, 1440 St. Catherines St. W., Montreal. **$24,800.**

Que., Dorval — IMPROVEMENTS — Dpt. Transport, Ottawa, Ont., developing imprvs., grading, stripping, drainage, hard surface taxi strip and parking area, to Dibblee Constr. Co., Ltd., 248 Albert St., Ottawa, Ont., about **$25,000.**

Que., Montreal—PIER—Dom. Govt., Ottawa, Ont., reconstructing King Edward Pier, Montreal Harbour, day labor. **$25,000.** Natl. Harbours Bd., 357 Common St., engr.

LATIN AMERICA

Mexico—Mexican Govt., Scrita. de C.y O. P. Mexico, D.F., plans bridge to connect **Tijuana**, Lower California Territory with

LATIN AMERICA (Cont'd.)

the U. S., $350,000; Cuautla Municipal Govt., Palacio Municipal, Cuautla, plans expanding, imprv., water and drainage sys., reconditioning streets and build spa at **Amilcingo**, $615,000.

Mexico, Cordoba, near Vera Cruz—Impex, S. A., c/o A. Campoamor & F. Ramirez, Mexico City, plans dehydration plant, $100,000.

Mexico, Mexico City—Mexican Fed. Govt., Ministry of Communications & Pub. Wks., plans 7 mi. drainage tunnel in flood prevention proj., etc., $3,000,000; plans earthern and rein.-con. water storage reservoir to provide outlet for excessive rainfall in city, $2,500,000.

Mexico, Mexico City—Mexican Petroleum Co., Pemex, c/o E. Buinssstro, plans construction, equipping 100 octane gasoline refinery plant, $2,000,000; plans plant unit to manufacture by-products of high-octane gasoline mfg. plant, $500,000.

Venezuela—Colon Development Co., Ltd., Caribbean Petroleum Co., Ltd., subsidiaries of Royal Dutch Shell Co., Caracas, plans expansion oil pipeline facilities in republic of Venezuela.

Venezuela—Lago Petroleum Corp., Creole Petroleum Co., subsidiaries of Standard Oil Co. of New Jersey, 26 Bway., New York, N. Y., U. S. A., plans expansion of crude oil pipe line facilities.

Venezuela—Sinclair Oil Corp., Gulf Bldg., Houston, Tex., U. S. A. (parent organization), large oil refinery plant at Seaboard Terminal.

PUBLIC BUILDINGS

PROPOSED WORK

†California—Pub. Housing Auth., NHA, 785 Market St., San Francisco, plans by Blanchard, Maher & Ward, 369 Pine St., San Francisco, family dwelling units, Calif. 4745. CD 8/11—ENR 8/19.

†California—Pub. Housing Auth., NHA, 785 Market St., San Francisco, plans by W. Soule & J. F. Murphy, 116 E. Sola St., Santa Barbara, dormitory units, Calif. 4753. CD 8/11—ENR 8/19.

†California—Pub. Housing Auth., NHA 785 Market St., San Francisco, plans by C. H. Widdows, 327 E. Channel St., Stockton, trailer units, Calif. 4743 and Calif. 4757; plans by J. U. Clowdsley, Exchange Bldg., Stockton, dormitory accommodations, Calif., 4744; plans by E. G. Ernst, 561 E. Harding St., Stockton, family dwelling units, Calif. 4741 and Calif. 4756. CD 7/27—ENR 7/29.

†California—Pub. Housing Auth., NHA, 785 Market St., San Francisco, plans by L. F. Starks, Monadnock Bldg., San Francisco, family dwelling units, Calif. 4760. CD 8/20—ENR 8/26.

†California—Pub. Housing Auth., NHA, 785 Market St., San Francisco, plans by J. U. Clowdsley, Exchange Bldg., Stockton, dormitory units, Calif. 4748. CD 8/2—ENR 8/5.

†California—Pub. Housing Auth., NHA, 785 Market St., San Francisco, plans by Jos. Losekann, 311 E. Market St., Stockton, family dwelling units, Calif. 4742.

†California—Pub. Housing Auth., NHA, 785 Market St., San Francisco, plans by Marsh, Smith & Powell, Architects' Bldg., Los Angeles and J. Dewey Harnish, 212 E. B St., Ontario, family dwelling units, Calif. 4758. CD 8/19—ENR 8/26.

†California—Pub. Housing Auth., NHA, 785 Market St., San Francisco, plans by Geo. Adams, 2430 Cascadia Dr., Glendale, dormitory accommodations, Calif. 4759. CD 8/19—ENR 8/26.

†California—Pub. Housing Auth., NHA, 875 Market St., San Francisco, plans by Kent & Hass, 525 Market St., San Francisco, family dwelling units, Calif. 4754 and dormitory accommodations, Calif. 4755. CD 8/16—ENR 8/19.

†California—U. S. Eng., 74 New Montgomery St., San Francisco, bldg., No. 1106 San Francisco Co.

†California—U. S. Eng., 74 New Montgomery St., San Francisco, bldg. addns., alterations, Job No. 1088, San Francisco Co.

★**†California**—U. S. Eng., 74 New Montgomery St., San Francisco, bldgs., Siskiyou Co. Over $1,000,000.

†Calif., Alameda—Home Owners' Loan Corp., Pacific Bldg., San Francisco, plans by L. S. Mosias, 2957 Jackson St., San Francisco, converting residence at 2015 San Antonio Ave., into 3 living units, No. W4D-95. $6,000.

†Calif., Berkeley—Home Owners' Loan Corp., 1440 Bway, Oakland, Zone 12, plans by Reynolds & Chamberlain, 564 Market St., San Francisco, converting residence into living units, No. W4B-113. Over $5,000.

†Calif., Berkeley—Home Owners' Loan Corp., 1440 Bway., Oakland, Zone 12, plans by Reynolds & Chamberlain, 564 Market St., San Francisco, converting residence at 2701-3-5 Grant St., into living units. Over $5,000.

†Calif., Oakland—Home Owners' Loan Corp., 1440 Bway., Zone 12, plans by L. S. Mosias, 2957 Jackson St., San Francisco, converting residence at 432 Lagunitas Ave., into 4 living units, No. W4B-1002. $8,000.

†Calif., Oakland—Home Owners' Loan Corp., 1440 Bway., Oakland, Zone 12, plans by Reynolds & Chamberlain, 564 Market St., San Francisco, converting residence at 715-17 Peralta St., into living units, No. W4B-1010. Over $5,000.

†Calif., Oakland—Home Owners' Loan Corp., Pacific Bldg., San Francisco, plans by R. A. Hutchison, 3433 Andover St., converting residence at 2609 E. 14 St. and 26 Ave., into 8 living units, No. W4B-317, $15,000; plans by K. Pousford, 900 Creed Rd., converting residence at 207 Orange Rd. into 4 living units, No. W4B-1086, $8,000, and converting residence at 1940 9 Ave., into 4 living units, No. W4B-1105, $8,000

†Calif., Port Chicago—Yards & Docks, Navy Dpt., 18 St. and Constitution Ave. N.W., Wash., D. C., engineering-architectural services by Miller & Warnecke, confer. engrs. and archts., 1700 Financial Center Bldg., Oakland, for bldg., NOY 7426.

†Calif., San Diego—Yards & Docks, Navy Dpt., 18 St. and Constitution Ave., N.W., Wash., D. C., engineering-architectural services by Hunt & Chambers, 816 West Fifth St., Los Angeles, in connection with NOY 6823, 7409 and 7278, bldg., NOY 7405.

†Calif., San Francisco—Home Owners' Loan Corp., Pacific Bldg., plans by Frank Wynkoop & Associates, 821 Market St., converting hotel at 1436 Grant Ave., into 10 living units, Job No. W4A-874. $20,000.

†Calif., San Francisco — Home Owners' Loan Corp., Pacific Bldg., plans by R. I. Stringham, 486 California St., converting residence at 1019 Ashbury St., into 7 living units. $14,000.

★**†Colorado**—U. S. Eng., 909 17 St., Denver, bldgs., Weld Co., $1,000,000.

†Connecticut—Pub. Housing Auth., NHA, 24 School St., Boston, Mass., postponed indefinitely bids to have been opened Aug. 27, drainage, grading, incl. roads, walks, etc., for housing, Conn. 6031 and 6032. CD 8/24.

†Conn., Waterbury — Home Owners' Loan Corp., 2 Park Ave., New York, N. Y., 100 family unit conversion program.

†Florida — Pub. Housing Auth., NHA, Georgia Savings Bank Bldg., Atlanta, Ga., plans by Yonge & Hart, Thiesen Bldg., Pensacola, family dwelling units, Fla. 8223, Fla. 8224, and Fla. 8225, and dormitory units, Fla. 8226. CD 8/11—ENR 8/19.

†Florida — Pub. Housing Auth., NHA, Georgia Savings Bank Bldg., Peachtree and Broad Sts., Atlanta, Ga., plans by M. C. Greeley, Barnett Bldg., Jacksonville, dormitory units, Fla. 8226 and family dwelling units, Fla. 8221.

†Georgia—Pub. Housing Auth., NHA, Georgia Savings Bank Bldg., Peachtree and Broad Sts., Atlanta, plans by C. C. Poundstone, Palmer Bldg., and Jas. W. Cooper, Forsythe Bldg., Atlanta, family dwelling units, Ga. 9161. CD 8/11—ENR 8/19.

†Idaho—Pub. Housing Auth., NHA, Skinner Bldg., 5 Ave. and Union St., Seattle, 1, Wash., rejected bids Aug. 17, family housing, Idaho 10105. $150,000. CD 8/30 under LB—ENR 7/29.

†Ill., Galesburg—Federal Works Agency, 20 N. Wacker Dr., Chicago, bldgs., recreation center. $43,700.

†Ind., Crane—Yards & Docks, Navy Dpt., 18 St. and Constitution Ave. N.W., Wash., D. C., engineering services by Russell B. Moore Co., 1456 W. Delaware Ave., Indianapolis, bldg., Naval Ammunition Depot, NOY 6893.

†Ia., Burlington — Sisters of St. Francis, Clinton, nurses home. $159,042, FWA. CD 4/6—ENR 4/8.

†Ia., Des Moines—Iowa Methodist School of Nursing, 1200 Pleasant St., nurses school and home, $51,650, FWA.

†Kansas—Pub. Housing Auth., NHA, Dierks Bldg., 1006 Grand Ave., Kansas City, Mo., plans by L. Schmidt, 1832 E. Second St., Wichita, family dwelling units, Kan. 14136. CD 8/11—ENR 8/19.

†Kan., Dodge City—Home Owners' Loan Corp., Woodmen of the World Bldg., Omaha, Neb., 50 family unit conversion program.

†Kan., Eudora—Federal Works Agency, 15 W. Kellogg Blvd., St. Paul, Minn., school bldg., Kan. 14-249. $72,000.

†Kentucky—Pub. Housing Auth., NHA, 2073 E. Ninth St., Cleveland, O., temporary family dwelling units, Ky. 15111, dormitory units, Ky. 15112.

†Louisiana—U. S. Eng., 25 St. and Avenue F, Galveston, Tex., fuel oil stand-by sys., for bldg., Solic. 359-44-C112, Orleans Parish. Project reduced in size. CD 8/13, under BA.

La., Lake Charles—Calcasieu Parish School Bd., c/o H. A. Norton, supt., plans by Dunn & Quinn, Lake Charles, rebuilding school. $175,000. $125,000 bonds voted.

†La., Lake Charles—Pub. Housing Auth., NHA, 1205 Electric Bldg., Seventh and Taylor Sts., Fort Worth, Tex., 200 trailers or portable shelter units, La. 16096.

La., Leesville—City plans by Dunn & Quinn, Lake Charles, 2 recreation facilities. $66,675. Applied for FWA funds.

†Maine—Pub. Housing Auth., NHA, 24 School St., Boston, Mass., plans by I. Lester Veal, 465 Congress St., Portland, family dwelling units, Me. 17082. H. E. Bailey, 177 State St., Boston, Mass., engrs.

†Maine—Pub. Housing Auth., NHA, 24 School St., Boston, Mass., plans by Lester Beal, 465 Congress St., Portland and Desmont & Lord, assoc. archts., 6 Beacon St., Portland, family dwelling units, Me. 17082. H. E. Bailey, 117 State St., Boston, Mass., engr. CD 8/11—ENR 8/19.

†Me., Old Orchard—Bd. Town Selectmen, Town Hall, plans by A. J. Harriman, 43 Shepley St., Auburn, 8 rooms, wood, school. $95,000. FWA.

†Me., Portland—Pub. Housing Auth., NHA, 24 School St., Boston, Mass., 200 family dwelling units, Me. 17083.

★**†Maryland** — Fairchild Aircraft Corp., Hagerstown, plans by Albert Kahn Assoc. Engrs. & Archts., Inc., 345 New Center Bldg., Detroit, Mich., factory addn. $6,000,000. Federally financed.

†Maryland—Pub. Housing Auth., NHA, Temporary Bldg. 2, 19 and D Sts. N.W., Wash., D. C., cancelled bids to have been opened Aug. 30, dormitory units, Md. 18266, family dwelling units, Md. 18267; dormitory units, Md. 18268 and family dwelling units, Md. 18269. Projects temporarily in abeyance. F. L. W. Moehle & Assoc., 325 N. Charles St., Baltimore, archts. CD 8/16—ENR 8/26.

Md., Leonardtown—Bd. Educ., St. Marys Co., Court House, plans by J. J. Baldwin, 925 15 St. N.W., Wash., D. C., school.

†Md., Leonardtown—St. Marys Co., 2 story jail and 1 story jailers residence, Md. 18-182. $68,600 FWA allot. CD 3/4—ENR 3/11.

†Massachusetts—Pub. Housing Auth., NHA, 24 School St., Boston, plans by T. F. McDonough, 168 Dartmouth St., Boston, family dwelling units, Mass. 19085. CD 8/16—ENR 8/26.

†Massachusetts—U. S. Eng., 31 St. James Ave., Boston, hospital, Middlesex Co.

†Mass., Falmouth—Pub. Housing Auth., NHA, 24 School St., Boston, 100 dormitory units, Mass. 19088 and 200 trailers or portable shelter units, Mass. 19089.

†Mass., Lynn—Lynn Hospital, 212 Boston St., Lynn, bids will be asked in 3 or 4 weeks, nurses home, 4 story, brick, LY 5-2198. $150,000. FWA. Stevens, Curtin, Mason & Riley, 45 Newbury St., Boston, archts. CD 8/19—ENR 8/26.

†Mass., Northampton—Veterans Admin. Vermont Ave. between H and I Sts. N.W., Wash., D. C., neuro-psychiatric institute main bldg. addn.

†Michigan—Pub. Housing Auth., NHA, 2073 E. Ninth St., Cleveland, O., plans by Mills, Rhines, Bellman & Nordhoff, 518 Jefferson St., Toledo, O., temporary family dwelling units, Mi. 20205. CD 8/2—ENR 8/5.

†Michigan—Pub. Housing Auth., NHA, 2073 E. Ninth St., Cleveland, O., plans by Harley, Ellington & Day, Stroh Bldg., Detroit, family dwelling units, Mi. 20209. CD 7/27—ENR 7/29.

†Michigan—Pub. Housing Auth., NHA, 2073 E. Ninth St., Cleveland, O., temporary family dwelling units, Mi. 20212, Mi. 20213 and Mi. 20214.

†Michigan—Pub. HousingAuth., NHA, 2073 E. Ninth St., Cleveland, O., temporary dwelling units, Mi. 20215.

†Mich., Dowagiac—Pub. Housing Auth., NHA, 2073 E. 9 St., Cleveland, O., plans by Harley, Ellington & Day, Stroh Bldg., Detroit, family dwellings, Mi. 20216. CD 7/27—ENR 7/29.

†Miss., Biloxi—Home Owners' Loan Corp., Sterick Bldg., Memphis, Tenn., 5 family unit conversion program.

Mo., Warrensburg — Warrensburg Clinic, plans by Neville & Sharp, 1221 Baltimore St., Kansas City, Mo., hospital. $47,346. Applied for FWA funds.

†New Hampshire—Pub. Housing Auth., NHA, 24 School St., Boston, Mass., plans by M. E. Witmer, Hillside Dr., Portsmouth, commercial bldg., incl. super market, for housing.

†New Jersey—Kinetic Chemicals, Inc., Du Pont Bldg., Wilmington, Del., plant addn. for mfg. "Freon 12," fluorine refrigerant. Federally financed.

†New Jersey—U. S. Eng., 120 Wall St., New York, 5 N. Y., plans by Frank Grad & Son, 48 Commerce St., Newark, bldgs., Essex Co. CD 7/27—ENR 7/29.

†New Mexico—Pub. Housing Auth., NHA, 1205 Electric Bldg., Seventh and Taylor Sts., Fort Worth, Tex., plans by Haynes, Strange, Parkhill, Voelcker and Dixon & J. Schaefer, Lubbock, Tex., family dwelling units, N.M. 29168. CD 8/2—ENR 8/5.

†New Mexico—Pub. Housing Auth., NHA, 1205 Electric Bldg., Seventh and Taylor Sts., Fort Worth, Tex., cancelled bids to have been opened Aug. 18, family dwelling units, N.M. 29166., W. C. Kruger, Box 308, Santa Fe, archt. CD 8/8—ENR 8/12.

†North Carolina—Pub. Housing Auth., NHA, Georgia Savings Bank Bldg., Peachtree and Broad Sts., Atlanta, Ga., 500 addnl. housing units.

†Oklahoma—Pub. Housing Auth., NHA, 1205 Electric Bldg., Seventh and Taylor Sts., Fort Worth, Tex., plans by Winkler & Reid, Oklahoma Savings & Loan Bldg., Nafziger, Lawrence & Ellingson, 2507 N.W., 23 St., Oklahoma City, family dwelling units, Okla. 34076. CD 8/2—ENR 8/5.

†Oklahoma—Pub. Housing Auth., NHA, 1205 Electric Bldg., Seventh and Taylor Sts., Fort Worth, Tex., plans by Senter, Wood & Graig, 307 Philtower Bldg., Tulsa, family dwelling units, Okla. 34075. CD 8/2—ENR 8/5.

C BLDGS. (Proposed Work, Cont'd.)

Clinton—Home Owners' Loan Corp., Exchange Bldg., Dallas, Tex., 90 unit conversion program.

Allentown-Bethlehem—Home Owners' Corp., 2 Park Ave., New York, N. Y., 50 unit conversion program.

Titusville—Federal Works Agency, 101 Ave., New York, N. Y., hospital addn.

Warren—Sylvania Products, Inc., m, plans by C. Wagner, 133 W. 4 St., sport, radio parts mfg. plant. $40,000- Federally financed. CD 8/16, under al Bldgs.

Sioux Falls—Sioux Valley Hospital Euclid and 20 St., hospital imprvs., ment. $144,000. **FWA.** CD 3/16—18.

essee—Yards & Docks, Navy Dpt., 18 Constitution Ave. N.W., Wash., D. C., Hanker & Heyer, Commerce Title illington, bldgs. $126,000.

Raines Station—Defense Plant 811 Vermont Ave. N.W., Wash., aluminum plants. $36,000,000. Rey- Metals Co., c/o L. P. Macauley, vice 2500 S. 2 St., Louisville, Ky., will

—Pub. Housing Auth., NHA, 1205 Bldg., Seventh and Taylor Sts., Fort family dwelling units.

—Pub. Housing Auth., NHA, 1205 Bldg., Seventh and Taylor Sts., Fort plans by Page, Southerland & Page B. Livesay, 2805 Bowman Ave., Austin, dwelling units, Tex. 41-602 and Tex. CD 8/11—ENR 8/19.

—Pub. Housing Auth., NHA, 1205 Bldg., Seventh and Taylor Sts., Fort plans by Thomas, Sharp, Welch & and Paul C. Bentley, Construction Dallas, family dwelling units, Tex. CD 8/11—ENR 8/19.

Borger—Pub. Housing Auth., NHA, ectric Bldg., Seventh and Taylor Sts., orth, 300 trailers or portable shelter Tex. 41608.

Dallas—Home Owners' Loan Corp., Exchange Bldg., Dallas, converting es into 700 dwelling units. Over

Fort Worth—Federal Works Agency, ectric Bldg., plans by W. G. Clarkson First National Bank Bldg., Fort Crestwood School bldg., Tex. 41916 F.

Freeport—Pub. Housing Auth., NHA, ctric Bldg., Seventh and Taylor Sts., orth, 100 trailers, Tex. 41606.

Grand Prairie—Grand Prairie Ind. Dist. school bldg. $150,000. **FWA.** mon, Tower Petroleum Bldg., Dallas,

Houston—Home Owners' Loan Corp., Exchange Bldg., Dallas, plans by H. A. 3908 Main St., remodeling 7 floors ory office bldg. into residential units rtments, $150,000.

McAllen—McAllen Municipal Hospital, plans by W. C. Hedrick, 1st Natl. Bldg., Ft. Worth, new hospital bldg. utilities, etc. $150,000. Applying for funds.

San Antonio—City Pub. Service Bd., Mary's St., secondary electric power ldn. $2,000,000. Gibbs & Hill, Penn- Station, New York, N. Y., engrs. —ENR 7/8.

Sweetwater — Home Owners' Loan Pacific Bldg., Dallas, 20 family unit n program.

—Pub. Housing Auth., NHA, Dierks 1066 Grand Ave., Kansas City, Mo., ousing, Utah 42061.

Nassawadox — Northampton-Acco- emorial Hospital, Nassawadox, plans Lublin, Dickson Bldg., Norfolk, hos- ldn. $156,500. **FWA.**

Norfolk—Yards & Docks, Navy Dpt., and Constitution Ave. N.W., Wash., engineering services by Consoer, & Quinlan, 211 W. Wacker Dr., Ill., in connection with NOY 4188, 4403, 5616, 4415 and 4154, bldg., rd, NOY 7344.

Pasco—Pub. Housing Auth., NHA, Bldg., Seattle, 200 family dwelling Wash. 45236.

Port Angeles—Pub. Housing Auth. inner Bldg., Seattle, 40 family dwell- s, Wash. 45237.

Port Orchard—School Bd., Port school addns., Docket 45-248. **FWA.**

Edmonton—Dominion Govt., Ottawa, ans by Dpt. P. Wks., District Archi- h. Bldg., Calgary, remodeling exist- , and addns. to provide accommoda- Selection Service and Mobilization

Esquimalt—Wartime Housing Ltd., St., Toronto, Ont., one hundred six houses. About $265,000.

Halifax—Dominion Govt., Ottawa, ans by Dpt. Naval Affairs, Cartier wa, Ont., Rockhead Naval Hospital $150,000.

Picton—Provincial Govt., Halifax, architect, c/o Royal Comn. on Provincial Development, Halifax, low-cost homes. $150,000.

Ont., Brantford—Dom. Govt., Ottawa, conversion large homes into small units, $200,000.

Ont., Burlington Government—Dpt. Natl. Health & Pensions, Ottawa, military hospital, Queen Elizabeth Way, $400,000.

Ont., Froomfield (Postal District Sarnia)—Syndicate, c/o Village Clk., Froomfield, dwellings on 263 acre site. $200,000.

Que., Granby—Les Soeours-De La Chaxite De L'Hotel Dieu De St. Hyacinthe, plans by Perrault & Gadbois, 3795 Van Horne Ave., Montreal, general hospital. $250,000.

Que., Rock Island—Wartime Housing Ltd., 55 York St., Toronto, 50 dwellings, $160,000.

BIDS ASKED

Bids Asked September 7

†Michigan—Pub. Housing Auth., NHA, 2073 E. Ninth St., Cleveland, O., trailer units, MI. 20204. Plans deposit $50. Maier & Outcalt, 13124 Shaker Sq., Cleveland, O., archts. CD 6/30—ENR 7/8.

Bids Asked After September 7

†Pennsylvania—Pub. Housing Auth., NHA, 270 Bway., New York, 7, N. Y., roads and sewers for housing Pa. 36031. Plans deposit $10. M. C. Krause, 10 W. 4 St., Williamsport, engr. CD 8/19.

†Pennsylvania—Pub. Housing Auth., NHA, 270 Bway., New York, 7, N. Y., community bldgs., miscellaneous changes. Pa. 36171. Plans deposit $20. CD 8/19—ENR 8/26.

†Pennsylvania—Pub. Housing Auth., NHA, 270 Bway., New York, 7, N. Y., tenant activity bldgs., site work, for housing Pa. 36201, for Allegheny Co. Housing Auth., Pittsburgh. Plans deposit $20. CD 8/19—ENR 8/26.

Bids Asked September 9

†Mississippi—Pub. Housing Auth., NHA, Georgia Savings Bank Bldg., Peachtree and Broad Sts., Atlanta, Ga., family dwelling units, Miss. 22174. Plans deposit $50. L. Daniel Gehr and J. Allen Bradford, engr., Old Peoples Bank Bldg., Biloxi, archts. CD 8/23—ENR 8/26.

†Texas—Pub. Housing Auth., NHA, 1205 Electric Bldg., Seventh and Taylor Sts., Fort Worth, family dwelling units, Tex. 41-602 and family dwelling units, Tex. 41-603. Plans deposit $50. Page, Southerland & Page and W. B. Livesay, 2805 Bowman Ave., Austin, archts. CD 8/19—ENR 9/2.

Bids Asked September 10

Conn., Southbury—State Comptroller, State Capital, Hartford, plans by Henry Van Zelm, 11 Asylum St., Hartford, power plant conversion.

Conn., Southbury—State, F. R. Zeller, comptroller, Hartford, power plant alterations and equipment, Southbury Training School. Plans deposit $10.

†Nevada—Pub. Housing Auth., NHA, 785 Market St., San Francisco, Calif., family dwellings, Nev. 26153 and dormitory housing, Nev. 26154. H. R. Lake, Claremont Hotel, Berkeley, Calif., archt. CD 7/23—ENR 7/29.

Bids Asked September 14

Ont., Ottawa—Dpt. P. Wks., Ottawa. Addn. No. 2 and alterations to Dom. Govt. Office Bldg. 3, Carling Ave. About $250,000. Plans deposit $50. C. D. Southerland, Dpt. P. Wks., Ottawa, archt.

Bids Asked September 17

†Mississippi—U. S. Eng., Grant St., west of Westwood St., Mobile, Ala., bldg. and addn., Harrison Co.

Bids Asked After September 18

†Pennsylvania—Pub. Housing Auth., NHA, 270 Bway., New York, 7, N. Y., family dwelling units, Pa. 36437. Plans deposit $50. Thalheimer & Weitz, 1315 Walnut St., Phila., archts. CD 8/5—ENR 8/12.

Bids Asked September 20

†Michigan—Pub. Housing Auth., NHA, 2073 E. Ninth St., Cleveland, O., temporary family dwelling units, Mi. 20180. Extended date. Plans deposit $50. O. Winn and P. Brezner, 112 Madison Ave., Detroit, archts. CD 8/18—ENR 8/26.

Bids Asked September 24

★ **†Wash., Renton**—Pub. Bldgs., 18 and F Sts. N.W., Wash., 25, D. C., 1 story masonry hospital. $500,000. G. W. Stoddard, Orpheum Bldg., Seattle, Zone 1, archt. CD 10/7—ENR 10/15.

Bids Asked about September 30

†Wash., Vancouver—Pub. Bldgs. Admin., 18 and F Sts. N.W., Wash., D. C., 5 school bldgs. Docket Wash. 45-251. **FWA.** Whitehouse & Roehr, and D. J. Stewart, Vancouver, archts. CD 8/30.

Bids Asked

†Fla., Greenwood—Jackson Co. Bd. Pub. Instruction, addnl. school facilities. $40,112. **FWA.**

†Fla., Ft. Lauderdale—Broward Co. Pub. Instruction, 5 nurseries and child care centers. $92,209. **FWA.**

†Ga., Atlanta—Pub. Bldgs. Admin., 18 and F Sts. N.W., Wash., 25, D. C., Grady Hospital nurses home, Docket Ga. 9-235. **FWA.** Hentz-Adler & Shutze, Candler Bldg., and C. Ford & J. Warren Arnistead, 240 W. Andrews Dr. N.W., archts. CD 8/12—ENR 8/19.

Ind., Batesville — Walter Scholer, archt., 1114 State St., Lafayette, 2 story, bsmnt., brick, stone, rein.-con. hospital, new laundry, etc., for Margaret & Mary Memorial Hospital, Batesville, $300,000. Plans deposit $25.

†Massachusetts—U. S. Eng., 31 St. James Ave., Boston, (selected list bidders), temporary bldg., No. 19-023-44-Neg 41, Suffolk Co.

†Massachusetts—U. S. Eng., 31 St. James Ave., Boston, (selected list bidders), temporary bldgs. No. 19-023-44-Neg 40, Barnstable Co.

†New Jersey—U. S. Eng., 120 Wall St., New York, 5, N. Y., bldg., Essex Co.

†Oklahoma—U. S. Eng., 416 Wright Bldg., Tulsa, Zone 2, bldg. expansion, Sol. 957-neg-44-40, Oklahoma Co.

†Pennsylvania—Yards & Docks, Navy Dpt., 18 St. and Constitution Ave. N.W., Wash., D. C., bldg. Extended date. J. R. Carrel, 1700 Walnut St., Phila., archt. CD 8/16.

LOW BIDDERS

★ **†California**—Contra Costa Housing Auth., 700 D St., Martinez, family dwelling units and administration bldg., Calif. 4713, from L. Epp, 4745 Geary Blvd., San Francisco, **$1,655,377.** CD 8/13.

†California—U. S. Eng., 751 S. Figueroa St., Los Angeles, Zone 14, bldgs., No. 325C, Riverside Co., from Ed. Goral, 416 W. 8 St., Los Angeles, between **$150,000-$151,000.**

†Florida — Pub. Housing Auth., NHA, Georgia Savings Bank Bldg., Peachtree and Broad Sts., Atlanta, Ga., dormitory units, Fla. 8211, dwelling units, Fla. 8212 and family units, Fla. 8213, from A. Farnell Blair, 215 Church St., Decatur, Ga., masonry **$448,715,** prefabricated **$452,644.** CD 7/20—ENR 8/5.

†Maine—Pub. Housing Auth., NHA, 24 School St., Boston, Mass., Aug. 27, family housing, from J. Capobianco, 44 School St., Boston, Mass., **$270,000.** CD 8/23—ENR 8/19.

★ **†Michigan** — Pub. Housing Auth., NHA, 2073 E. Ninth St., Cleveland, O., Aug. 13, housing, MI. 20179, from Miller-Davis Co., Kalamazoo, prefabricated, **$593,000,** frame **$592,000***** from A. H. Proksch, Iron Mountain, plastered wall **$690,000** wood frame, plastered **$667,000***** from Spence Bros., Saginaw, masonry, **$639,400.** CD 8/12.

★ **†Nebraska**—Pub. Housing Auth., NHA, Dierks Bldg., 1006 Grand Ave., Kansas City, Mo., Aug. 27, family housing, Neb. 25072 and dormitory housing Neb. 25073, from Francis R. Onshek Co., Fisk Bldg., Amarillo, Tex., masonry constr. **$938,106,** prefabricated constr., **$637,766.** CD 7/21—ENR 7/29.

†Oregon—Pub. Housing Auth., NHA, Skinner Bldg., Seattle 1, Wash., Aug. 24, family housing and dormitory housing, Ore. 35270, from Halvorson Constr. Co., Salem, **$241,777.** CD 8/18—ENR 7/29.

★ **†South Carolina**—Pub. Housing Auth., NHA, Georgia Savings Bank Bldg., Peachtree and Broad Sts., Atlanta, Ga., Aug. 24, family housing, from H. C. Beck, Atlanta, Ga., **$1,012,700.** CD 8/20—ENR 8/12.

†S. C., Beaufort—Pub. Bldgs. Admin., 18 and F Sts. N.W., Wash. 25, D. C., Aug. 26, hospital, SC 38-185, from H. S. Coble, Greensboro, N. C., **$244,700. FWA.**

†Texas—Pub. Housing Auth., NHA, 1205 Electric Bldg., Seventh and Taylor Sts., Fort Worth, site imprvs., for housing, Tex. 41-597, from E. E. Farrow, Inc., 2808 Inwood St., Dallas, **$62,000.** Carter & Burgess, Century Bldg., Fort Worth, engrs.

★ **Wash., Seattle**—Port of Seattle, Bell St. Terminal, Zone 1, Aug. 23, 2 transit sheds, Connecticut St. Terminal, from Western Constr. Co., Arctic Bldg., Zone 4, **$561,157.** CD 8/9—ENR 8/12.

Ont., Toronto—Dpt. P. Wks., Ottawa, Military Hospital addn., Christie St., from Dickie Constr. Co. Ltd., 17 Yorkville St. Est. about **$250,000.** C. D. Sutherland, Dpt. P. Wks., Ottawa, archt.

Que., Montreal South—Dpt. Natl. Defense (Army), Ottawa, Ont., medical examination centre at Jacques Cartier Barracks, from Concrete Constr. Ltd., 1082 Decarie Blvd., Montreal. Est. **$150,000.**

CONTRACTS AWARDED

†California—U. S. Eng., 74 New Montgomery St., San Francisco, bldg., Job No. 1106, San Francisco Co., to Empire Constr. Co., Ltd., 344 Harriet St., San Francisco. Awarded 8/27.

†Calif., San Pedro—Yards & Docks, Navy Dpt., 18 St. and Constitution Ave. N.W., Wash., D. C., addnl. storage, NSD, NOY 6718, to R. E. Campbell, Box 3186, Terminal Annex, Los Angeles, **$221,710.**

†Florida—U. S. Eng., 575 Riverside Ave., Jacksonville, Zone 2, temporary bldgs., Orange Co., to James F. Barnes Constr. Co., 705 Metcalf Bldg., Orlando, **$150,000.** Awarded 8/19.

†Florida—U. S. Eng., 575 Riverside Ave., Jacksonville, Zone 2, addnl. bldgs., structures, Neg-Jax-44-118, Dade Co., to Fred Howland, Inc., 1114 Postal Bldg., Miami, Zone 1, under **$100,000.** Awarded 8/25.

†Florida—U. S. Eng., 575 Riverside Ave., Jacksonville, Zone 2, bldgs., Neg-Jax-44-99, Dade Co., to Paul A. Miller Constr. Co., Leesburg, under **$500,000.** Awarded 8/24.

PUBLIC BLDGS. (Contracts Awarded, Cont'd)

†Florida—U. S. Eng., 575 Riverside Ave., Jacksonville, Zone 2, bldg., Neg-Jax-44-122, Duval Co., to Paul A. Miller Constr. Co., Leesburg, under **$50,000.** Awarded 8/23.

†Indiana—Defense Plant Corp., 811 Vermont Ave., N.W., Wash., D. C., factory bldgs., 1 story gate bldg., laboratory bldg. and miscellaneous bldg., brick, to Lincoln Constr. Co., 4814 N. Damen Ave., Chicago, Ill. Arthur G. McKee & Co., 3352 Michigan Ave., Indiana Harbor, archts. Inland Steel Co., 3210 Watling St., East Chicago, will operate.

†Iowa—U. S. Eng., Clock Tower Bldg., Rock Island, bldgs., etc., Clinton Co., to A. H. Newmann & Bros., Hubbell Bldg., Des Moines. Est. under **$50,000.**

Ky., Louisville—W. P. Hogarty, dir. Div. Purchases & Pub. Properties, 230 New State Office Bldg., Frankfort, hospital, Hazelwood Sanatorium, to G. H. Rommel & Co., 958 Logan St., **$435,000.** Bids 8/24, awarded 8/25. CD 8/6—ENR 8/12.

†Louisiana—Gulf Distilling Corp., Gretna, yeast house at plant, to American Heating & Plumbing Co., 829 Baronne St., New Orleans, approx. **$50,000.** Defense Plant Corp. will finance. CD 8/16—ENR 8/19.

†Me., Brunswick—Yards & Docks, Navy Dpt., 18 St. and Constitution Ave. N.W., Wash., D. C., ammunition storage facilities, access roads, NAS, NOY 6585, to W. H. Hinman, Inc., North Anson, **$127,900.** CD 8/6.

†Md., Bethesda—Yards & Docks, Navy Dpt., 18 St. and Constitution Ave. N.W., Wash., D. C., completion of work under Contr. NOY 5268, bldg., Naval Medical Center, NOY 7368, to John McShain, Inc., 17 and Spring Garden Sts., Phila., Pa. Additional to CD 5/6/42, under CA.

★**†Michigan**—Pub. Housing Auth., NHA, 2073 E. Ninth St., Cleveland, O., frame dwelling units, Mi. 20,189, to J. A. Price, Lafayette, Ind. Est. **$650,000.** CD 6/23—ENR 7/1.

†Michigan—U. S. Eng., 700 Union Guardian Bldg., Detroit, recreation bldgs., Macomb Co., to Atkin-Fordon Co., 7360 W. Chicago Ave., Detroit, under **$1,000,000.**

†New Jersey—U. S. Eng., 120 Wall St., New York, 5, N. Y., temporary bldg. addns., No. 30-075-Eng-40, Middlesex Co., to Spearin, Preston & Burrows, Inc., 50 Church St., New York, N. Y. Est. **$40,000.**

★**†New Jersey**—Yards & Docks, Navy Dpt. 18 St. and Constitution Ave. N.W., Wash. D. C., bldgs., Sect. 3, to Cauldwell-Wingate Co., 101 Park Ave., New York, N. Y., **$2,500,000-$3,000,000.** Bids about 8/26. CD 8/13—ENR 8/19.

†Ohio—Pub. Housing Auth., NHA, 2073 E. 9 St., Cleveland, family dwellings, Oh. 33271, to Lloyd Builders, Inc., 182 N. Wabash Ave., Chicago, Ill., wood dry wall constr., **$341,000.** Bids 8/18, awarded 8/25. CD 8/5—ENR 8/12.

★**†Ohio**—Pub. Housing Auth., NHA, 2073 E. Ninth St., Cleveland, housing, Ohio 33252, to Welso Constr. Co., 2233 W. Grand Ave., Chicago, Ill., **$824,945.** Awarded 8/19. CD 8/3—ENR 8/5.

†Ohio—Pub. Housing Auth., NHA, 2073 E. Ninth St., Cleveland, converting office bldg. into apartment bldg., to Brown Constr. Co., 1900 Euclid Ave., Cleveland; electrical work, to Superior Lite Co., 1193 E. 105 St., Cleveland. Est. **$150,000.** H. A. Fulton, 5716 Euclid Ave., Cleveland, archts.

†Ohio—Republic Steel Corp., Republic Bldg., Cleveland, sponge iron plant, to Girdler Co., S. Bway., Louisville, Ky. Est. **$450,000.** Defense Plant Corp. will finance. CD 10/30—ENR 11/5.

★**†Pennsylvania**—Pub. Housing Auth., NHA, 270 Bway., New York, 7, N. Y., family dwelling units, Pa. 36435, to Tobias Heller & Co., Inc., 441 Lexington Ave., New York, N. Y. **$1,827,000.** Bids 8/12. CD 8/16—ENR 8/19.

★**†Tenn., Raines Station**—Defense Plant Corp., 811 Vermont Ave. N.W., Wash., D. C., aluminum plant, to Struck Constr. Co., 147 N. Clay St., Louisville, Ky., **$18,000,000.** Reynolds Metals Co., c/o L. R. Macauley, vice pres., 2500 S. 3 St., Louisville, Ky., will operate.

★**†Texas**—Defense Plant Corp., 811 Vermont Ave. N.W., Wash., D. C., will build synthetic rubber plant, under supervision Goodyear Rubber Co., 1144 E. Market St., Akron, O., and General Tire & Rubber Co., 1708 E. Market St., Akron, O., operators. **$1,250,000.** CD 7/21—ENR 7/29.

†Texas—Pub. Housing Auth., NHA, 1205 Electric Bldg., Seventh and Taylor Sts., Fort Worth, Tex. 41 173, super-market and laundry plant, to Bellows Constr. Co., Bankers Mfg. Bldg., Houston, **$66,000.** Stone & Pitts, Goodhue Bldg., Beaumont and Salisbury, McGinty & Werlin, 2017 W. Gray St., Houston, assoc. archts.

†Texas—Pub. Housing Auth., NHA., 1205 Electric Bldg., Seventh and Taylor Sts., Fort Worth, super-market and laundry plant, Tex. 41173, to R. P. Farnsworth Co., Box 850, New Orleans, La., **$58,825.** Stone & Pitts, Goodhue Bldg., Beaumont, and Salisbury, McGinty & Werlin, 2017 W. Gray St., Houston, archts.

†Texas—U. S. Eng., 231 W. Main St., Denison, addnl. construction, Moore Co., to Eckert-Fair Constr. Co., 1207 Liberty Bank Bldg., Dallas, approx. **$285,000** and to Sherman Machine & Iron Works, 18-E. Main St., Oklahoma City, Okla., **$45,000.**

†Virginia—Pub. Housing Auth., NHA, Temporary Bldg. 2, 19 and D Sts. N.W., Wash., D. C., site imprvs., Va. 44131 and 44136, to Leo Butler Co., 8416 Georgia Ave., Silver Spring, Md., **$118,983.** Awarded 8/25.

†Va., Portsmouth—Yards & Docks, Navy Dpt., 18 St. and Constitution Ave. N.W., Wash., D. C., fuel oil burning facilities conversion, St. Helena Repair Base Power Plant, Norfolk Navy Yard, NOY 6571, to Rust Engineering Co., Clark Bldg., Pittsburgh, Pa., **$128,095.**

†Washington—Pub. Housing Auth., NHA, Skinner Bldg., Seattle, Zone 1, dormitory and family housing, to Halvorson Constr. Co., Salem, Ore., **$219,400.** Bids 8/20. CD 8/5—ENR 8/12.

†Wyoming—Pub. Housing Auth., NHA, Dierks Bldg., 1006 Grand Ave., Kansas City, Mo., temporary dwellings, Wyo. 48031, to Green Bros., Cheyenne, **$362,345.** Bids 7/29. CD 7/20—ENR 7/20.

Man., Winnipeg—Dpt. Natl. Defense (Army), Ottawa, supply depot and C.W.A.C. accommodation at Ft. Osborne, to Bird Constr. Co., Ltd., 708 Confederation Life Bldg. **$150,000.**

Quebec—Dom. Govt., Ottawa, Ont., factory, to A. F. Byers Co. Ltd., 1226 University Ave., Montreal, **$49,000.** Dpt. Munitions & Supply, Ottawa, Ont., engr.

Que., Montreal—Dpt. Natl. Defense (Army), Ottawa, Ont., power house, etc., to Chas. Durauceau, Ltd., 5847 Hamilton St., about **$185,000.**

COMMERCIAL BUILDINGS

PROPOSED WORK

★**Calif., Long Beach**—Owner, c/o Hugh Gibbs, archt., 245 Carroll Park West, Long Beach, 300 frame, stucco single family dwellings. Over $500,000.

★**Calif., San Bernardino**—Western Defense Housing Corp., 1041 E. Green St., Pasadena, plans by J. Douglas, 1041 E. Green St., Pasadena, 200 dwelling units. Over $500,000.

★**Calif., Torrance**—Dawson Homes Inc., 468 N. Camden Dr., Beverly Hills, plans by W. J. Gage, 468 N. Camden Dr., Beverly Hills, 180 rental units, 2 story frame, stucco. $800,000.

N. C., Charlotte—Strand Theater, Inc., H. F. Kinsey, genl. mgr., theater on 97x185 ft. site, S. Tryon and W. 2 Sts.

O., Cleveland—F. Volk, 19633 Lake Rd., forty-five 1 story, 25x29 ft., brick dwellings, $270,000.

★**O., Cleveland**—Metropolitan Park Apartments, Inc., c/o D. Loftus, Marshall Bldg., sketches by G. H. Burrows, 3113 Moreland Blvd., 52 terrace effect apartment bldgs., site imprvs., $1,500,000.

Pa., Phila.—Maurice Heilreil, Narberth & Price Ave., plans by W. H. Thomas, Architect Bldgs., 130 apartment housing units, Melrose Park.

Tenn., Memphis—Collins Chapel Hospital, c/o Dr. W. S. Martin, Ashland and Lane Sts., imprv. hospital, etc. $150,000.

Tex., Dallas—Cortney Gardens Development Co., Inc., 4353 Lovers Lane, 25 duplexes, 1 story, brick veneer, concrete fdns. $150,000.

Tex., Houston—Barbee Apartments, Inc., 200 Blk. Barbee St., four 2 story, brick veneer, apartment bldgs., concrete fdns. $150,000.

Tex., Houston—Housing, Inc., 5324 Kirdy Dr., 100 brick, clay tile 5 and 6 room residences, concrete fdn., etc., off Market St. Rd. $450,000.

Tex., Houston—Honerkamp Lumber Co., c/o Denver Addn., plans by J. Knostman, 2017 W. Gray St., forty 1 story, frame asbestos dwellings. $190,000.

Tex., Pasadena—Beverly Courts, Pasadena, 55 frame dwellings, $200,000.

Wash., Seattle—Associated Builders, 4519 California Ave., Seattle, Zone 6, 68 houses, 37 Ave. S.W. between W. Graham and W. Juneau Sts. $340,000.

Alta., Calgary—Western Homes, Ltd., c/o Chinook Bldg. Supplies, Ltd., East Calgary, dwellings, $150,000.

Alta., Edmonton—W. A. Trudeau, Santa Monica, Calif., U. S. A., homes, $300,000.

Ont., Galt—Thomas Construction Co., Ltd., 45 Dickson St., 1 story, bsmnt. dwellings, brick walls, concrete fdns., $150,000.

BIDS ASKED

★**Ont., Toronto**—W. R. Webb, archt., 85 Vaughn Rd., 64 houses, Rummymede Gardens, Ellis and Windermere Aves., for General Properties, Ltd., 85 Vaughan Rd. $556,000.

CONTRACTS AWARDED

Calif., Inglewood—Conoga Investment Co., 450 Subway Terminal Bldg., Los Angeles, 100 frame, stucco dwellings, **$350,000.** Owner builds. W. E. Chadwick, Union League Bldg., Los Angeles, Zone 12, engr.

Calif., Ontario—S. V. Hunsaker & Associates, 2711 W. 7 St., Los Angeles, 53 frame, stucco, dwellings. Owner builds. Over **$150,000.** C. N. Aldrich, 1834 Dawson Ave., Long Beach, archt.

Calif., San Leandro—[illegible] Homes Co., Standard Homes Inc. 1 [illegible] 14 St., [illegible] story, frame residences. [illegible] owner builds [illegible] cal work, to Clifford [illegible] St., Oakland. Est. $410,000.

Conn., Naugatuck — [illegible] Corp., Moran and McArthur [illegible], Waterbury, garden type duplex [illegible] Owner builds, **$155,000.** [illegible] Pearl St., Hartford, [illegible]

O., Cleveland—B. & L. Constr. Co., [illegible] W. Foster, 637 A [illegible] Commerce Bldg., twenty-seven 1 story, [illegible] dwellings, to B. Imbrigiotto, 3238 E. [illegible] Est. **$162,000.**

Pa., Phila.—Max & David Chipin, [illegible] 17 St., apartment development consisting [illegible] 62 housekeeping suites, Broad St. and [illegible] Oak Lane Sect., Phila. Owner builds. [illegible] CD 1/5—ENR 1/7.

Tex., Beeville—Rentals Inc., Beeville, [illegible] frame dwellings, force account. [illegible] CD 8/18—ENR 8/26.

Tex., Cuero—J. T. Newman & Sons, [illegible] frame type dwellings, concrete fdns., [illegible] etc. Owner builds, $210,000. CD [illegible] 8/5.

Tex., Dallas—Cortney Gardens Development Co., Inc., 4253 Lovers Lane, twenty-five [illegible] duplex dwellings. Owner builds. $150,000. 8/25—ENR 9/2.

Tex., Galveston—First Mortgage Co., Houston, Inc., M. Esperson Bldg., Houston, 64 family living units, to Plumb-Mitchell Inc., 55 St., approx. $150,000.

Tex., Houston—Lawndale Terrace, [illegible] W. G. Farrington, 1719 Sunset Blvd., [illegible] 2 sty. solid masonry apartment bldg., [illegible] account. **$235,000.** FHA. CD 8/16—ENR [illegible]

Tex., Houston—Barbee Apartments Inc., [illegible] Blk. Barbee St., seven 2 story, brick veneer apartment bldgs., to L. P. McKenzie, owner, approx. **$150,000.** CD 8/25.

Tex., Pasadena—Beverly Courts, [illegible] Bldg., 55 frame type dwellings. Owner builds. Approx. **$200,000.**

Tex., Pasadena—Whitworth Corp., Pasadena. 20 dwellings, incl. utilities, appurtenances, etc., force account. $150,000. [illegible] & Knostman, 2017 W. Gray St., Houston, archts. CD 8/5—ENR 8/12.

Tex., San Antonio—B. B. Smith, 1112 [illegible] National Bldg., 25 frame type dwellings, [illegible] ties, etc. Owner builds. **$150,000.** CD [illegible]

Ont., Creighton Mine—International Nickel Co. of Canada Ltd., 25 W. King St., Toronto, 45 frame, brick dwellings, concrete fdns., [illegible] Hill-Clark-Francis Ltd., 7 Whitewood [illegible] New Liskeard, **$193,500.**

Ont., Levack—International Nickel Co. of Canada Ltd., 25 W. King St., Toronto, [illegible] frame, brick houses, concrete fdns., to [illegible] rington Constr. Co., Ltd., 319 Whitaker [illegible] Sudbury, **$246,200.** CD 7/27—ENR 7/29.

Ont., Toronto—Salter Constr. Co. Ltd., [illegible] Radnor Rd., Toronto, 50 bungalows on [illegible] Woodbine Ave., own forces. About $1[illegible]

Que., Shawbridge — Bd. Governors [illegible] Farm & Training School, to W. G. Hu[illegible] Co., Ltd., 1405 Bishop St., Montreal. $1[illegible] CD 7/22.

INDUSTRIAL BUILDINGS

PROPOSED WORK

Conn., West Haven — FACTORY — [illegible] Thompson, Inc., engrs., 211 State St., Bridgeport, soon lets contract addnl. 1 story, 100 [illegible] ft., rein.-con. factory, Main St., for Armstrong Rubber Co., 475 Elm St. Over $40,000. 8/23—ENR 8/26.

Ill., Tuscola—FACTORY—Sturgell Air [illegible] Parts Depot, rebuilding factory bldg.

Maryland—PLANT BUILDING—J. E. [illegible] ner Co., engr., 1201 St. Paul St., Baltimore, soon lets contract 2 story, 41x92 ft., [illegible] asbestos shingles employees training [illegible] concrete fdn., for Maryland Drydock [illegible] Fairfield, $50,000.

Md., Relay—PLANT BUILDING—J. E. [illegible] gram & Sons, 7 St. Rd., Louisville, Ky., [illegible] lets contract altering bottling bldg. for [illegible] sonnel bldg. and cafeteria, $40,000.

Mass., Leominster—PLANT—R. L. [illegible] mas, pres. Chamber of Commerce, food [illegible] age plant, quick freezing facilities, [illegible] lockers for community use. $40,000.

Mass., Malden (br. Boston)—PLANT—[illegible] verse Rubber Co., 392 Pearl St., will [illegible] struct 1 story, 80x85 ft., rein.-con. plant [illegible] alterations. Project abandoned. CD [illegible] ENR 7/29.

Mass., Pittsfield—MOTOR PLANT—[illegible] Electric Co., Morningside Ave., soon lets [illegible] tract 1 story, 50x124 ft., brick, concrete [illegible] plant factory addn. $40,000.

Miss., Gulfport—EXTRACTOR, etc.—[illegible] nix Naval Store Co., N. Gulfport, rebuild [illegible] extractor and refinery, destroyed by [illegible] $100,000.

N. J., Hoboken—PLANT BLDG.—[illegible] Metals Mfg. Co., 1012 Grand St., [illegible] Jas. C. Schaffler, 78 Irving Pl., New [illegible]

TRIAL BLDGS. (Proposed Work, d.)

1 story, 57x133 ft. cafeteria top addn. plant, $45,000.

Livingston—GARAGE, etc.—De Camp nes, 49 W. Mt. Pleasant Ave., soon lets ct 1 story, concrete block bus garage achine shop addn., $45,000. Willard 309 Bloomfield Ave., Caldwell, archt. 2—ENR 3/25.

Newark—PLANT—Best Blades Inc., ene St., plans by Abe Silberstein, 24 St., converting present bldg. into bsmnt., brick mfg. plant. $40,000.

Middlefield — FACTORY, etc. — Johnson Co., H. Johnson, pres., rebuilding warehouse and shipping bldg. $40,000.

Bristol—FACTORY—Bristol Lace Wood St., plans by Barker & Turoff, Grosvenor Bldg., Providence, brick Bayview Ave. $40,000.

McAllen—SALES and STORAGE—k Hermann, c/o Rosalee Millinery McAllen, 2 story, brick, rein.-concrete, and storage bldg. $45,000.

Mercedes — PLANT — Rio Banco 102 Illinois St., bldg., facilities for le and citrus packing and shipping.

Pharr—PLANT—M. Weisfeld, Pharr, citrus and vegetable packing plant concrete. $40,000.

Weslaco Valley—WAREHOUSE—Rio Citrus Exchange, Weslaco, 1 story, ft. rein.-con., brick warehouse. $65,000.

Janesville—PLANT—Wisconsin Soy-Corp., Janesville, soybean processing

Port Washington—PLANT—Harnisch-Corp., lessee, 4400 W. National Ave., kee, altering, repairing bldg. for diesel plant. $40,000. R. Brent, c/o lessee.

Edmonton—PLANT—Alberta Motor -98 Ave., Edmonton, new plant, $40,000.

Lethbridge—PLANT—Alberta Cement L., c/o J. L. Redford, Cardston, cement plant. $75,000.

Burnaby (Postal District Vancouver) NT—Owner, c/o A. Horie Constr. Co., 46 E. 2 Ave., Vancouver, engineering $250,000.

Fort St. John—SAW MILL, etc.—R. John Lumber Co., Ltd., Pomeroy, and associated plant. $40,000.

Fruitvale—PLANT—Nelson Lumber d., c/o A. Nelson, Fruitvale, saw mill, mill and logging plant.

C., Vancouver — WOODWORKING , etc.—Shelly Sawmills, Ltd., 503 Bldg., Vancouver, woodworking plant, ill, etc. $50,000.

S., Halifax—STORES—Canadian Na-Rys., H. A. Dixon, ch. engr., 360 Mc-t, Montreal, Que., commissary stores $150,000.

Brockville—PLANT——General Milk s of Canada Ltd., 198 W. Pearl St., lle, plant addn. $40,000.

Kitchener—PLANT—Canadian Blower Co., Ltd., 90 Woodside Park, Kitch-lant addn.

Mimico — PLANT — Dom. Abrasive Co. Ltd., 49 Main St., plant exten.

North Bay—PLANT—The Craig Bit L. North Bay, 49x120 ft. plant addn., ling. $50,000.

Orillia—WAREHOUSE—York Trading 5 Sherburne St., Toronto, warehouse, 0,000.

Peterborough — PLANT — T. Pringle grs., 36 Toronto St., Toronto, soon lets t remodeling, constructing 17x76 ft., lant addn., concrete fdn., for Dom. Ltd., 80 W. Richmond St., Toronto.

Pickering—PLANT BLDG.—Defence es Ltd., 1135 Beaver Hall Hill, Mont-e, cafeteria at Ajax plant. $150,000.

Woodstock—PLANT—Eureka Foundry Co., Ltd., 143 Winnett Ave., factory.

Woodstock—PLANT—Firestone Cotton Canada, Ltd., E. Sweeney, mgr., Ox-, plans by Hutton & Sauter, Pigott Hamilton, 1 story, 84x160 ft., brick xten., concrete fdn., Oxford St. $216,000 d.

Chambly Canton—PLANT—Bennett Chambly Canton, plant remodelling, $40,000.

Luceville — SAW MILL — Luceville Co. Ltd., Luceville, saw mill and g plant. $40,000.

Montreal—PLANT—Brandram Hen-Ltd., 6684 St. Urbain St., paint mfg. ddns.

Montreal—PLANT—Electrolier Mfg. L., 5849 Boyer St., plans by H. Green-1434 W. St. Catherine St., Montreal, ddn. $40,000.

Montreal — PLANT — International Co., Ltd., c/o V. Barre, 132 W. St. t., mining plant, bldgs.

Que., Montreal—PLANT—West Disinfecting Co., Ltd., 5641 Casgrain St., plans by A. L. Perry, 1502 W. Ste. Catherine St., plant extens.

Que., Montreal — PLANT — Woodworker's Ltd., c/o J. Cohen, 445 St. Francois-Xavier St., woodworking plant.

Que., St. Jean Port Joli—FACTORY—L. & J. B. Toussaint Co., furniture factory. $40,000.

Que., St. Laurent (Postal District Montreal)—FACTORY—N. Warran Ltd., 980 St. Antoine St., Montreal, plans by architect c/o R. C. Merkeley, 980 St. Antoine St., factory. $40,000.

Que., Terrebonne—PLANT—Mathew Moody & Sons Co., St. Louis Rd., reconstructing farm implement mfg. plant. $75,000.

Sask., Palo—PLANT—Midwest Chemicals, Ltd., plant reconstruction.

Yukon Territory, Whitehorse—PLANT—Frontier Beverage Ltd., Whitehorse, new plant, necessary equip. $50,000.

LOW BIDDERS

Bids Asked

Que., Montreal—PLANT—Thibodeau & Germain, archts., 1178 Phillips Pl., 1 story 75x160 ft., brick plant addn., concrete fdn., for John Labatt Ltd., 3081 East Ontario St.

CONTRACTS AWARDED

Calif., Palo Alto—FACTORY—Kaar Engineering Co., 619 Emerson St., 1 story, 100x100 ft., brick, frame factory bldg., to John J. Moore Co., 959 33 St., Oakland. Est. **$40,000.** R. H. Cooley, 959 33 St., Oakland, structural engr.

Calif., San Pedro—OIL REFINERY—The Texas Co., 929 S. Bway., Los Angeles, oil refinery bldgs., 2100 E. Pacific Coast Hy., to Foster Wheeler Corp., 714 W. Olympia Blvd., Los Angeles, approx. **$77,400.**

Ind., Lawrenceburg — POWER HOUSE — Schenley Distillers, Inc., Lawrenceburgh, 1 story, 47x55 ft., brick, concrete, steel, power house addn., to Frank Messer & Sons Co., 2515 Burnett St., Cincinnati, O., **$225,000.** C. J. Kiefer, 26 E. 6 St., Cincinnati, O., engr. Awarded 8/18.

Ia., Clinton—PLANT—Feed Mills Div. of Pillsbury Flour Mills Co., Met. Bldg., 2 Ave. S., Minneapolis, Minn., soy bean processing plant, to H. N. Leighton Co., 716 S. 7 St., Minneapolis, Minn.

★**Ky., Frankfort**—PLANT—Schenley Distillers Corp., C. J. Kiefer, vice-pres., 26 E. 6 St., Cincinnati, O., protein recovery plant, incl. 2 story dry house, boiler plant alterations, addns. and new yeast room, etc., to Frank Messer & Sons, Inc., 2515 Burnett St., Cincinnati, O. Est. **$553,000.**

Maryland— PLANT BUILDING —Maryland Drydock Co., Fairfield, 2 story, 41x92 ft., frame employees training bldg., to Lacchi Constr. Co., 337 St. Paul Pl., Baltimore, **$40,000.** CD 8/20—ENR 9/2.

Md., Baltimore— LABORATORY —Koppers Co., Koppers Bldg., Pittsburgh, Pa., 1 story, 65x95 ft., brick, steel mechanical laboratory, Bush and Wicomico Sts., to Morrow Bros., 14 E. Eager St., **$45,000.** R. M. Gibson, 3321 Liberty Heights Ave., engr.

Michigan — FACTORY — Goodyear Tire & Rubber Co., A. Beiswenger, E. Market St., Akron, O., soon lets contract Factory Bldg. 9, **$150,000.** J. Gordon Turnbull, 2630 Chester Ave., Cleveland, O., engr.

Minn., Alexandria — SKIM-MILK SPRAY DRYING PLANT—Land O' Lakes Dairy, Inc., L. L. Getten, production mgr., 2201 N.E. Kennedy St., Minneapolis, 1, 2 and 3 story, 94x118 ft. skim-milk spray drying plant, 24x80 ft. garage addn., to J. B. Nordenstrom, Mora. Est. over **$150,000.** CD 8/4—ENR 8/12.

N. J., Hackensack — FACTORY—Hackensack Cable Corp., 87 Zabriesskie St., brick factory addn., to Di-Carolis, Inc., 125 Hudson St., **$40,000.** C. V. Bogert, 210 Main St., Hackensack, archt.

N. J., Morris Plains—BOTTLING PLANT—Alderney Dairy Co., 26 Bridge St., Newark, 1 story, part bsmnt. pasteurizing and bottling plant, cinder, block and stucco, to Sturgis Bros., 22 Garden St., Morristown, **$40,000.** W. E. Lehman, 972 Broad St., Newark, archt.

N. J., Newark—PLANT—Celanese Corp. of America, 290 Ferry St., 2 story brick pulverizing bldg. and buffing bldg., to Schouler Constr. Co., 183 Frelinghuysen Ave., **$50,000.** CD 8/9—ENR 8/12.

N. J., Roebling—FACTORY—J. A. Roebling, Roebling, 1 story addn. to connect to present brick factory bldgs. of wire mfg. plant, to Andrew Christensen & Son, 1140 E. Jersey St., Elizabeth, **$40,000.**

O., Cleveland—PLANT—American Magnesium Corp., 2600 Harvard Ave., 46x82 ft. locker and laboratory bldg., 1 story, 57x114 ft., office bldg., 27x40 ft., brick, steel shop bldg., to San W. Emerson Co., 1836 Euclid Ave. Est. **$80,000.** Awarded 8/25. Malcomson, Calber, Hammond, Inc., 1217 Griswold St., Detroit, Mich., engrs. CD 6/8—ENR 8/10.

O., Elyria—FACTORY—Electro Alloys Co., W. C. Whyte, vice pres., Taylor St., 1 story, 90x150 ft., brick, steel, concrete factory bldg., to The Austin Co., 16110 Euclid Ave., Cleveland. Est. $40,000. CD 8/17—ENR 8/19.

Pa., Forest Hills (br. Pittsburgh)—LABORATORY—Westinghouse Electric & Mfg. Co., Geo. H. Parkman, dir. Bldg. Constr. and Maintenance, Maloney Bldg., Pittsburgh, 1 story, 20x59 ft., brick combustion laboratory, to Geo. H. Chilli, First National Bank Bldg., Homestead. CD 7/7—ENR 7/15.

Pa., Jenkintown—PLANT—Standard Pressed Steel Co., plant, to Townsend, Schroeder & Wood, Inc., 1700 Sansom St., Phila., **$150,000.** Widdicombe Engineering Co., 1700 Sansom St., Phila., archt.

R. I., Pawtucket—PLANT—White Cleansing Co., Jefferson St., 2 story, 95x160 ft. plant, Jefferson and West Sts. Owner builds. **$42,000.** Dwight Seabury Co., 188 Main St., engr. CD 8/3—ENR 8/5.

Tex., Baytown—COOLING TOWERS—Humble Oil & Refining Co., Baytown, reconstructing 2 cooling towers at refinery plant. Owner builds. **$100,000.** CD 8/5—ENR 8/12.

Tex., Fort Worth — FACTORY — Leonard Bros., 2617 W. 7 St., 3 story, brick, concrete clothing mfg. factory bldg., remodeling, addn., to Cain & Main, Majestic Bldg., approx. **$40,000.**

Tex., Houston—PLANT—Oil Tool Mfg. Co., 1318 Nance St., structural steel and masonry plant, day labor. **$65,000.** S. Dixon, 6902 Main St., engr.

Tex., Houston—OIL REFINERY—Shell Oil Co., Deere Park, Houston, repairing, imprv. large oil refinery and synthetic rubber plant, force account. Over **$40,000.** CD 8/5—ENR 8/12.

Tex., Texas City—COOLING TOWERS—Republic Oil & Refining Co., Texas City, reconstructing 3 cooling towers at large refinery plant, force account. Approx. **$80,000.**

Tex., Weslaco—WAREHOUSE—Rio Grande Citrus Exchange, 1 story, 125x280 ft., brick, rein.-con. warehouse, rein.-con. fdn., to Noser Constr. Co., State Bank Bldg., McAllen, approx. **$65,000.** CD 8/25—ENR 8/26.

Wis., Delavan—WAREHOUSE—Turtle Valley Farms, c/o J. J. & T. H. Flad, archts., 133 Langdon St., Madison, 2 story, basmnt., 52x170 ft., frame warehouse, to T. S. Willis, 326 Hayes Block, Janesville. CD 5/25—ENR 5/27.

Wis., Marshfield—FACTORY—Blum Bros. Box Co., 137 W. 9 St., 2 story, 34x60 ft. factory addn., and adding 2nd floor to present 60x63 ft. bldg., to Wendelin Merkel, 709 W. Dodge St. Oppenhamer & Obel, Wausau and Green Bay, archts.

N. B., St. John—PLANT—Crystal Ice Co. Ltd., St. John, artificial ice plant, to John Flood & Sons, Ltd., Charlotte St., approx. **$42,000.** CD 8/18.

N. S., Liverpool—PLANT—Thompson Brothers Mchy. Co., Ltd., 2 story, 35x50x146 ft., plant exten., to H. Keddy, Liverpool, about **$40,000.** L. R. Fairn, Wolfville, archt.

Ont., Cardinal—PLANT—Canada Starch Co., Ltd., 637 Craig St. W., Montreal, Que., plant alterations, addns., to Dodge Constr. Co. Ltd., Cornwall, **$70,500.**

Ont., Niagara Falls — PLANT — Canadian Carborundum Co. Ltd., Stanley St., 90x180 ft. steel, corrugated iron sheeting, furnace bldg. addn., to Robertson Constr. Co. Ltd., 2 Clifton Ave., about **$235,000.** R. G. Albertson, Stanley St., supt.

Ont., Orillia — PLANT — Vollans Industries Ltd., 124 Tecumseth St., 3 story, 40x80 ft. plant, day labor. **$40,000.** CD 6/21—ENR 6/24.

Ont., Peterborough—PLANT—Dom Woolens Ltd., 80 W. Richmond St., Toronto, plant addn., to Eastwood Constr. Co. Ltd., Dominion Bank Bldg. T. Pringle & Son Ltd., 36 Toronto St., Toronto, Archts.

Que., Charny—PLANT—Canadian Natl. R.R., H. A. Dixon, ch. engr., (oper.) 360 McGill St., Montreal, two 25x130 ft., brick bldgs., concrete fdn., to Jobin Brothers, Inc., 88 Cote St. Louis, Quebec City.

Que., Lake Edward—ENGINE HOUSE—Canadian Natl. Rys., H. A. Dixon, ch. engr. (oper.), 360 McGill St., Montreal, engine house, to L. G. Ogilvie & Co., Ltd., 2228 Walkley Ave., Montreal, approx. **$150,000.**

Que., Magog—PLANT—Dom. Textiles Ltd., 710 Victoria Sq. Montreal, addn. 25x32x48 ft. concrete, brick, plant addn., etc., to Anglin, Norcross Ltd., 892 W. Sherbrooke St., Montreal, Pringle & Son Ltd., 485 McGill St., Montreal, engrs.

Que., Montreal—PLANT—Canadian Car & Fdry. Co. Ltd., 621 W. Craig St., remodeling part of plant, to Corinthian Constr. Co. Ltd., 5726 Sherbrooke St., **$43,675.**

Que., Montreal—PLANT—Canadian Oil Co. Ltd., Terminal Bldg., Toronto, Ont., 2 story, 70x80 ft. and 36x70 ft. addn., concrete fdn., to W. H. Harvey & Son, 56 Kensington Ave., Kingston, Ont. Est. **$40,000.** N. A. Armstrong, 19 Melinda St., Toronto, archt.

Que., Montreal—FACTORY—Cresswell Pomeroy Ltd., 604 du Courcelles St., factory exten., to A. F. Byers Constr. Co. Ltd., 1226 University St., **$50,000.** C. L. Douglas, 660 St. Catherine St. W., archt.

Que., Westmount—ROUND HOUSE—Canadian Pacific R.R., J. E. Armstrong, ch. engr. Windsor Station, Montreal, round house addn., to H. N. Gruner & Co., 395 Victoria Ave., **$56,000.**

For Proposal Advertisements see p. 22 & 23

OFFICIAL PROPOSALS

Official notices of bids wanted on construction and related work, equipment and material for government, state, municipal departments and private enterprises

RATE: THE RATE FOR OFFICIAL PROPOSAL ADVERTISING IS 50 CENTS PER LINE (OR FRACTION) PER INSERTION

COPY RECEIVED UP TO 10 A. M. TUESDAY FOR ISSUE OUT THURSDAY SUBJECT TO SPACE OPEN FOR LAST MINUTE ADS

SEND COPY TO OFFICIAL PROPOSAL DIVISION, ENGINEERING NEWS-RECORD, 330 W. 42ND ST., NEW YORK, N. Y.

OFFICIAL PROPOSALS

Bids: September 10, 1943 (169)

Sewer Construction

Sealed proposals for constructing approximately 130 feet of 6-inch, 7,950 feet of 8-inch, 460 feet of 10-inch, 510 feet of 12-inch, 1,770 feet of 15-inch vitrified pipe sewers and 1,570 feet of 6-inch vitrified pipe sewer house connections on Contract 147-S will be received at the office of the Washington Suburban Sanitary Commission, Hamilton Street, Hyattsville, Maryland, until 3:00 P. M., Friday, September 10, 1943, at which place and time they will be publicly opened and read.

Plans and specifications may be obtained from Harry R. Hall, Chief Engineer of the Commission, Hyattsville, Maryland, upon deposit of $5.00, which deposit will be returned to bidders, or to those returning plans and specifications in good condition.

WASHINGTON SUBURBAN SANITARY COMMISSION
Perry Boswell
J. Donald Clagett
Frank B. Smith
Commissioners.

Bids: Sept. 14, 1943 (167)

Pumps and Piping South District Filtration Plant

DEPARTMENT OF PUBLIC WORKS
CITY OF CHICAGO
CHICAGO, August 17, 1943.

SEALED PROPOSALS will be received by the City of Chicago until 11 A. M. (Central War Time), on Tuesday, September 14, 1943, at Room 406, City Hall, at which time and place all such proposals will be publicly opened and read, for furnishing, delivering and installing Pumps and Piping, including Traveling Crane, for the South District Filtration Plant, located in the vicinity of East 79th Street and Lake Michigan, Chicago, Illinois, in accordance with plans and specifications on file in the office of the Department of Public Works of said City, Room 406, City Hall.

The work to be done includes furnishing and delivering:

Division A—Two 700 gpm. horizontal centrifugal pumps.
Division B—One 7,500 gpm. vertical centrifugal pump.
Division C—Three 850 gpm. horizontal centrifugal sludge pumps.

It also includes furnishing, delivering and installing:

Division E—One 3-motor, 15-ton traveling crane.
Division F—Piping and miscellaneous equipment.

Under Division F the installation of the equipment in Divisions A, B and C is included, together with the installation of eight low lift pumps and motors previously purchased by the City.

Proposals must be made out upon blanks furnished at said office of the Department of Public Works, and be addressed to said Department, indorsed "Proposal for Pumps and Piping, South District Filtration Plant," and be accompanied with the following sums in money, or certified checks in the same amounts on responsible banks located and doing business in the City of Chicago and made payable to the order of the Commissioner of Public Works:

Divisions A, B and C....each	$100.00
Division E	$1,000.00
Division F	$5,000.00

Plans and specifications may be obtained upon payment of Fifteen Dollars ($15.00) for each set, which will be refunded upon the return of said plans and specifications in good condition within thirty (30) days after the opening of bids. Deposits to be in the form of money or certified check.

OFFICIAL PROPOSALS

In accordance with the provisions of the Act of the General Assembly of the State of Illinois, entitled "An Act regulating wages of laborers, mechanics and other workmen employed under contracts for public works," approved June 26, 1941, the general prevailing wage rates for work at the construction site are set forth in the specifications.

The Commissioner of Public Works reserves the right to reject any or all bids.

No proposal will be considered unless the party submitting the same shall furnish evidence satisfactory to the Commissioner of Public Works of ability, and the possession of the necessary facilities, together with sufficient pecuniary resources, to fulfill the conditions of the contract and specifications.

OSCAR E. HEWITT,
Commissioner of Public Works.

Bids: Sept. 22, 1943 (171)

State Highway Work

Sealed proposals will be received by the State Highway Department at its office, Dover, Delaware, until 2:00 P. M. E. W. T., Sept. 22, 1943, and at that time and place publicly opened for a contract involving the following approximate quantities:

CONTRACT No. 825
Lewes to Fort Miles - 1.572 Mi.
Sussex County
22' Cement Concrete Pavement
Federal Aid Project
DAWR-2

4,300 Cu. Yds. Excavation
1,600 Cu. Yds. Borrow
4,600 Cu. Yds. Cement Concrete Pavement
1,675 Lin. Ft. S.D.T. Expansion Joint
4,650 Lin. Ft. Trans. Contraction Joint
150 Lin. Ft. 18" Concrete Pipe

This project will come under the provisions of the Federal Highway Act, as amended, and the Defense Highway Act of 1941.

The Employment Agency for this contract shall be the Unemployment Service Division of the Unemployment Compensation Commission, at Georgetown, Delaware.

Attention is called to the Special Provisions in the proposal, specifications and contract agreement.

Performance of contract shall commence within ten (10) days after execution of the contract and be completed as specified.

Monthly payments will be made for 90 per cent of the construction completed each month.

Bidders must submit proposals upon forms provided by the Department.

Each proposal must be accompanied by a surety bond, certified check, or money to the amount of at least ten (10) per centum of the total amount of the proposal.

The envelope containing the proposal must be marked "Proposal for the construction of State Highway Contract No. ....."

The contract will be awarded or rejected within twenty (20) days from the date of opening proposals.

The right is reserved to reject any or all bids.

Complete sets of plans and specifications may be obtained after September 8, 1943, upon receipt of two dollars ($2.00) for each contract which amount will not be refunded.

Make checks payable to the State Highway Department.

STATE HIGHWAY DEPARTMENT
By: F. V. du Pont, Chairman.
W. W. Mack, Chief Engineer.
Dover, Delaware.
August 25, 1943

OFFICIAL PROPOSALS

Bids: Sept. 8, 1943

State Highway Work

STATE DEPARTMENT OF PUBLIC WORKS, DIVISION OF HIGHWAYS, ALBANY, N. Y.—Pursuant to the provisions of Chapter 63 Laws of 1936, as amended, and special provisions for projects financed with federal aid funds, sealed proposals will be received by the undersigned at the State Office Bldg., 13th Floor, Albany, N. Y., until one o'clock p.m., Eastern War Time, on Wednesday, September 8, 1943, for the following project: Maps, plans, specifications, and proposal forms may be obtained at the office of the District Engineer named below, and may be seen at the office of the State Department of Public Works, State Office Building, Room 898, Worth and Center Streets, New York City. The deposit for plans and proposal forms for a contract containing 1 to 15 sheets is $5.00; 15 to 30 sheets, $10.00; over 30 sheets, $20.00; refund will be made in full to bidders for the return of one set in good condition within 30 days of award or rejection of bids; refund for all other sets in good condition, similar period, will be 50% of deposit.

Contract No. and county	Type	Name	Deposit for de-plans	Bid posit	Miles
William Robinson, District Engineer, Weight Lock Bldg., Syracuse, N. Y.					
DA.RC.1 43-5 Seneca	Widening Roadway	Willard-Geneva Pts. 1 & 2 S.H. 8294 & 1773 Geneva-Mac Dougall S.H.8183 Geneva-Waterloo S.H. 5087	$5	$7,500	15.22

Special attention of bidders is called to "General Information for Bidders" in the proposal, specifications, and contract agreement, and to the special provisions applying to projects financed with federal funds. Proposal for the contract must be submitted in a separate sealed envelope with the name and number of the contract plainly endorsed on the outside of the envelope. The proposal must be accompanied by cash, draft or certified check payable to the order of "State of New York, Division of the Treasury," for the sum as specified in the advertisement and the proposal. The retention and disposal of the bidding check, the execution of the contract and bonds shall conform to the provisions of the Highway Law, as set forth in "Instructions to Bidders."

When optional types are permitted on contracts with federal funds, bidders must state in the space provided in the proposal the exact designation of the optional type on which the proposal is predicated.

Minimum Wage Rate per hour for all work shall be as follows:

County	Skilled Labor	Intermediate Grade Labor	Unskilled Labor
Seneca.....	$.80	$.80	$.80

UNLESS SHOWN OTHERWISE IN THE ITEMIZED PROPOSAL FOR THE PROJECT.

The right is reserved to reject any or all bids.

CHAS. H. SELLS
SUPT. OF PUBLIC WORKS

Additional OFFICIAL PROPOSAL Advertisements on page 23

OFFICIAL PROPOSALS

ATE: THE RATE FOR OFFICIAL PROPOSAL ADVERTISING IS 50 CENTS PER LINE (OR FRACTION) PER INSERTION
PY RECEIVED UP TO 10 A.M. TUESDAY FOR ISSUE OUT THURSDAY SUBJECT TO SPACE OPEN FOR LAST MINUTE ADS
ND COPY TO OFFICIAL PROPOSAL DIVISION, ENGINEERING NEWS-RECORD, 330 W. 42ND ST., NEW YORK, N. Y.

al Proposals continued from page 22

(U. S. Government)

(172)

ED STATES DEPARTMENT OF INTERIOR, Bureau of Reclamation, ington, D. C., August 17, 1943. Sealed Specifications No. 1057) will be re- at the office of the Bureau of ation, Yakima, Washington, until m., September 15, 1943, and then y opened, for *furnishing labor and als and performing all work for the ction of earthwork, pipe lines, and ures, laterals 50.4 to 59.0 and sub- s, and diversion channels, mile 30.97 ile 37.80, Roza division, Yakima , Washington.* The work is located iles northwest to four miles north- f Sunnyside, Washington. The prin- tems of work and the estimated quan- nvolved are as follows: 38,400 cubic of excavation, common, for laterals; ubic yards of excavation, rock, for s; 2,500 cubic yards of excavation, n, for diversion channels; 5,000 sta- ubic yards of overhaul; 4,520 cubic of excavation, common, for pipe es: 60 cubic yards of excavation, for pipe trenches; 3,350 cubic yards spacting embankments; 1,690 cubic of excavation, common, for struc- 60 cubic yards of excavation, rock, uctures; 3,750 cubic yards of backfill structures; 2,350 cubic yards of g or tamping backfill about struc- 4,580 cubic yards of backfill of pipe es; 829 cubic yards of concrete in ures; 890 cubic yards of dry-rock ; placing 5,000 pounds of reinforce- bars; erecting 7M ft. b. m. of timber uctures; installing 9,700 pounds of and miscellaneous metalwork; fur- and laying 2,970 linear feet of 6- iameter standard concrete irrigation furnishing and laying 2,110 linear f 8-inch diameter standard concrete irrigation pipe; furnishing and laying 3,680 linear feet of 10-inch diameter standard concrete irrigation pipe; furnishing and laying 3,090 linear feet of 12-inch diameter standard concrete irrigation pipe; furnishing and laying 2,040 linear feet of 15-inch diameter standard concrete irrigation pipe; furnishing and laying 15 linear feet of 18-inch diameter standard concrete irrigation pipe; furnishing and laying 60 linear feet of 6-inch diameter extra-strength concrete irrigation pipe; furnishing and laying 1,180 linear feet of 8-inch diameter extra-strength concrete irrigation pipe; furnishing and laying 540 linear feet of 10-inch diameter extra-strength concrete irrigation pipe; furnishing and laying 360 linear feet of 12-inch diameter extra-strength concrete irrigation pipe; furnishing and laying 240 linear feet of 15-inch diameter extra-strength concrete irrigation pipe; furnishing and laying 60 linear feet of 18-inch diameter extra-strength concrete irrigation pipe; furnishing and laying 520 linear feet of 8-inch diameter reinforced concrete pipe; furnishing and laying 328 linear feet of 12-inch diameter standard concrete culvert pipe; and furnishing and laying 48 linear feet of 15-inch diameter standard concrete culvert pipe. The work is work permitted by the War Production Board and application has been made for a suitable priority. A supplemental notice to bidders will be issued when action has been taken on the application for priority. This invitation for bids does not cover the purchase of materials which are to be furnished by the Government. Materials to be furnished by the contractor and those furnished by the Government are described in the specifications which will be a part of the contract. The work shall be commenced within thirty (30) calendar days after date of receipt of notice to proceed and shall be completed within one hundred and seventy (170) calendar days from the date of receipt of such notice. Guarantee will be required with each bid in an amount not less than 10 percent of the amount of the bid. Performance bond will be required in an amount not less than 50 percent of the estimated aggregate payments to be made under the contract. Payment bond will be required in the sum of one-half of the total amount payable by the terms of the contract. Liquidated damages for delay will be twenty-five dollars ($25) per day for each uncompleted schedule. Partial payments will be made monthly. No charge to prospective bidders for copies of the specifications and drawings; to others, $2.00 per copy, not returnable. For particulars, address the Bureau of Reclamation, Yakima, Washington; Denver, 2, Colorado; or Washington, 25, D. C. H. W. Bashore, Commissioner.

(U. S. Government)

Public Roads Administration, Federal Works Agency, Arlington County, Virginia, August 25, 1943, SEALED BIDS will be received at the office of the District Engineer, Public Roads Administration, 1440 Columbia Pike, Arlington, Virginia, until 10:00 o'clock, a.m., E.W.T., Sept. 15, 1943, for the construction of access road, Project VA DA WR-21 Paving 51, Henry G. Shirley Memorial Highway, Arlington and Fairfax Counties, Virginia. The approximate quantities of the more important items are as follows: 12,100 Cu. Yds. of Excavation; 20,000 Sq. Yd. Plain Cement Concrete Base Course; 2,900 Tons Cold Asphalt Concrete Pavement; 26,000 Sq. Yds. Reinforced Cement Concrete Pavement, and 13,000 Sq. Yds. Plain Cement Concrete Pavement. Minimum rates of wages for laborers and mechanics on this project will be fixed by the Secretary of Labor as required by law. Plans, specifications and proposal forms may be obtained at the address given above. H. J. Spelman, District Engineer. (173)

Employment Opportunities
Will be found on page 24

Where Every Day Counts—

Reach Your Prospects in the Construction Market
3 Days . . . 5 Days . . . 10 Days Sooner

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CONSTRUCTION at the rate of over $70,000,000 per week is going under contract. Bids are called on more work and still more is proposed.

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for guiding your sales activity to the most productive business areas.

Take advantage of this new war essential, high preference construction business, order your service to start now.

Business News Department

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Copy for new advertisements received until 10 A. M. Friday for following Thursday's Issue

HELP WANTED

Large fabricating shop located in Pittsburgh area wants experienced Structural Steel Estimator and Designer who understands structural steel shop costs. Give references and salary expected with application.

P-793, Engineering News-Record
330 W. 42nd St., New York 18, N. Y.

POSITIONS VACANT

These Positions Vacant advertisements are published subject to agreement by the advertisers not to consider applicants now employed on war work unless they obtain written release from present employer.

STEEL DETAILER capable of detailing, columns, trusses, beams and general type of structural steel work. Give salary, nationality and data available. Location Central New York. P-820, Engineering News-Record, 330 W. 42nd St., New York 18, N. Y.

SUPERINTENDENT of construction experienced on masonry hangars must be hard worker who can really produce executive. P-821, Engineering News-Record, 330 W. 42nd St., New York 18, N. Y.

INSTRUCTORS in Civil Engineering, Mathematics, Physics, and Chemistry for Army Specialized Training Program courses. $2800 and commutation for quarters. Work to begin October 11th. P-828, Engineering News-Record, 330 W. 42nd St., New York 18, N. Y.

ESTIMATOR AND ENGINEER for general contractor's office in middle west. Must be experienced in all types of general building and bridge construction. Permanent position. State in first letter qualifications, experience, age and draft status and salary desired. P-830, Engineering News Record, 520 N. Michigan Ave., Chicago 11, Ill.

SALES ENGINEER WANTED, age 38-40, to work in States Kentucky and Tennessee. College degree required, preferably in Civil or Chemical Engineering. Bituminous paving experience essential. This is permanent connection for the right man. In own handwriting give age, draft status, general outline of experience and salary expected. P-795, Engineering News-Record, 520 N. Michigan Ave., Chicago 11, Ill.

SANITARY ENGINEERS, interested in either Domestic or Foreign Service. Experienced in Design, Construction, Operation and Laboratory Control of Water and Sewage Systems of all types. P-815, Engineering News-Record, 520 N. Michigan Ave., Chicago 11, Ill.

POSITIONS WANTED

REINFORCED STEEL GENERAL FOREMAN familiar with field and office practice open for engagement. Recently completed a 14,000 Ton placement. PW-783, Engineering News-Record, 330 W. 42nd St., New York 18, N. Y.

ESTIMATOR—General Superintendent, 50, Swedish, graduate, E.E. 25 years experience, general building construction very capable, A1 references. PW-784, Engineering News-Record 520 N. Michigan Ave., Chicago 11, Ill.

PURCHASING AGENT experienced in construction purchasing, priorities, and governmental procedures. Past four years with: City of Tulsa, E. I. Dunont de Nemours and Co., Manhattan-Walco Construction Co., Stearns-Roger Mfg. Co. Capable of organizing and running efficient Purchasing Department. Age 29—Draft Classification 3A—Available September 15th. Will consider position outside United States. Contact R. P. Holbrook, Stearns-Roger Mfg. Co., Box 143, Great Bend, Kan.

CONTRACTS ENGINEER, 43, CE, 3-A-H, present Government assignment drawing to a close desires position with contractor, consulting engineer or surety company, where 20 years diversified CE experience including 10 years in Government specifications work, can be fully utilized. Excellent references. PW-796, Engineering News-Record, 330 W. 42nd St., New York 18, N. Y.

POSITIONS WANTED

ENGINEER—Graduate M. I. T., 18 years on Designing, Structural and Civil, Office Engineer. Executive Assistant for leading Consulting and Contracting firms. PW-770, Engineering News-Record, 330 W. 42nd St., New York 18, N. Y.

SALESMANAGER Heavy Construction — Dirt Moving—and Industrial Material Handling Equipment—18 years experience—new, used, rebuilt equipment—rentals—repairs and parts—appraisals — capable of taking complete charge of growing concern with a future in domestic or export business—free to travel anywhere—available about Sept. 15th. PW-794, Engineering News-Record, 330 W. 42nd St., New York 18, N. Y.

CONSTRUCTION SUPERINTENDENT—Manager. Age 49. University graduate, 23 years experience. Industrial plants, grain elevators, university buildings, sewage disposal plants, concrete paving, Naval bases. PW-808, Engineering News-Record, 520 N. Michigan Ave., Chicago 11, Ill.

AUDITOR, thoroughly familiar with procedure under Fixed Fee contracts, Accounting and finance training. Kansas University, with 7 years commercial accounting experience. Available immediately. PW-816, Engineering News-Record, 520 N. Michigan Ave., Chicago 11, Ill.

CONSTRUCTION ENGINEER or Superintendent. Graduate, C.E. Age 43, 18 years experience—Water Supply, sewerage, underground utilities, bridges. Available Sept. 15. PW-812, Engineering News-Record, 330 W. 42nd St., New York 18, N. Y.

ESTIMATOR ENGINEER, 30 years experience, in responsible charge many War, Navy & Housing Projects. PW-814, Engineering News-Record, 330 W. 42nd St., New York 18, N. Y.

CONSTRUCTION SUPERINTENDENT — 27 years experience, dirt moving, Sewers, tunnels, Concrete, Airports, Railroads, Highways and Housing, also Graduate Engineer, Age 46. Available immediately. PW-781, Engineering News-Record, 520 N. Michigan Ave., Chicago 11, Ill.

CONSTRUCTION EXECUTIVE — Age 51—Experienced General Building—Construction—Estimating — Purchasing — Costs — Finance — Negotiation — familiar government procedure and contracts—Project Manager three Navy Projects — States and Latin America. Available immediately. PW-797 Engineering News-Record, 330 W. 42nd St., New York 18, N. Y.

CONCRETE SUPERINTENDENT or General Foreman, 46 years of age, War Veteran, 30 years experience, foundations, floors, roads, docks. Go anywhere. PW-798, Engineering News-Record, 330 W. 42nd St., New York 18, N. Y.

WELDING SUPERVISOR, with tank erecting crew, now available, go anywhere, will consider Position as Welding Supervisor in war plant. Experience covers wide field of heavy construction Refineries Storage Tanks and pipe lines. Reference. PW-801, Engineering News-Record, 330 W. 42nd St., New York 18, N. Y.

CONSTRUCTION SUPERINTENDENT, Project Manager over 25 years experience all types Building Construction. Recently engaged on large Housing Projects. Well recommended good executive. Now available. PW-819, Engineering News-Record, 330 W. 42nd St., New York 18, N. Y.

TRAINED LABOR RELATIONS EXECUTIVE familiar with National Labor Relations Act, Fair Labor Standards Act, Davis-Bacon Act, Walsh-Healy Act and Government Executive Orders and regulations affecting management-labor relations in construction and production industries. Experienced in labor audit, job analysis and classification, manning tables, job relations training, collective bargaining, handling grievances and negotiation. Draft exempt. Available October 1st. Prefer middle west or southwest location. P. O. Box 1152, Tulsa, Oklahoma.

CIVIL ENGINEER, graduate; 34 years experience; design and construction; water supply; industrial plants; power plants; hydroelectric developments. PW-827, Engineering News-Record, 330 W. 42nd St., New York 18, N. Y.

POSITIONS WANTED

CIVIL ENGINEER, Graduate, 18 years experience design, construction and writing specifications, subways, buildings, heavy foundations, bulkheads, piers, power plants. Can take charge or work under supervision. Knows Spanish. PW-822, Engineering News-Record, 330 W. 42nd St., New York 18, N. Y.

ESTIMATOR—25 years experience in carpentry, brickmasonry and reinforced concrete for industrial, residential and current war construction. PW-823, Engineering News-Record, 520 N. Michigan Ave., Chicago 11, Ill.

MANAGER OR SUPERINTENDENT structural steel fabricating plant; 25 years experience, age 50; married; go anywhere; permanent position only; can furnish A-1 references; capable handling any size plant and get results. PW-824, Engineering News-Record, 330 W. 42nd St., New York 18, N. Y.

PROFESSIONAL ENGINEER (Registered Civil); 40; 17 years (seven industry and ten government) all types construction including railroad, highway, airports, dams. Well grounded in concrete soil stabilization, soil mechanics, bituminous and other construction materials in general. Member of leading technical societies, and author of several published technical papers. PW-825, Engineering News-Record, 330 W. 42nd St., New York 18, N. Y.

ESTIMATOR—experienced bidding general contracts, good knowledge of prices, familiar with defense and housing projects. PW-826, Engineering New-Record, 330 W. 42nd St., New York 18, N. Y.

PROJECT OR CONSTRUCTION MANAGER or general superintendent. Experience 20 years covering all kinds of structures and types of contracts in both the private and government fields, last three on low cost and defense housing. Location immaterial. PW-829, Engineering News-Record, 330 W. 42nd St., New York 18, N. Y.

DRAFTSMAN-STRUCTURAL—15 years experience also 5 years Architectural experience. Mr. Darst, Belmont Hotel, Newark, N. J.

OFFICE MANAGER—Draft exempt. Capable of assuming full charge of Construction office. Higher accounting and same legal education. 30 years experience in the accounting and Auditing field; thoroughly familiar with Construction costs and records—both from the standpoint of Contractor and Government. Can go anywhere. PW-831, Engineering News-Record, 520 N. Michigan Ave., Chicago 11, Ill.

CHIEF FIELD ENGINEER—to take charge of field engineering in any type of heavy or building construction. 20 years experience. Graduate in undergraduate and post graduate work in civil engineering. About to complete a lump sum building contract. PW-832, Engineering News-Record, 330 W. 42nd St., New York 18, N. Y.

STRUCTURAL ENGINEER, C.E. Graduate professionally licensed, over 20 years experience Estimating, Designing and Supervising Industrial Construction and Revamping desires permanent position record considered highly commendable. Philadelphia area preferable. PW-833, Engineering News-Record, 330 W. 42nd St., New York 18, N. Y.

CIVIL ENGINEER, Fourteen years Field experience Layout and Supervision. Roads, Bridges; Blast Furnace and General Building Experience. George W. Urban, 4925 E. 96th, Cleveland, Ohio.

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